The use of arbitration in the construction industry in England and Wales: an evaluation of its continuing role following the Arbitration Act 1996

William Henry Fisher MSc, Dip. Surv (building), Dip. Arb. FRICS (retired), FCIArb(retired).

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This work or any part thereof has not previously been presented in any form to the University or to any other body whether for the purposes of assessment, publication or for any other purpose (unless otherwise indicated). Save for any express acknowledgments, references and/or bibliographies cited in the work, I confirm that the intellectual content of the work is the result of my own efforts and of no other person.

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ABSTRACT

Due to the influence of the construction industry on the country's economy, resolution of disputes is very important. The Arbitration Act 1996 was passed to remedy the complaints that had made arbitration unpopular. Comments from academics and practitioners indicated that construction arbitration remained unpopular and procedural innovation anticipated had not materialised. This study considers arbitration in the construction industry in England and Wales and evaluates its use and role since the passing of the Arbitration Act 1996. It also explores the potential use of arbitration against the use of litigation, statutory adjudication, mediation and expert determination having regard to variables of size of claim and dispute.

A pragmatic theoretical perspective was followed, using a survey strategy. Initially a quantitative methodology was used, with structured questionnaires sent to users of arbitration, their legal advisers and construction arbitrators. To provide extension and clarification of matters revealed from questionnaires, interviews were conducted with construction arbitrators and construction lawyers, thereby incorporating a qualitative methodology.

The study shows a significant decline in the use of construction arbitration, but comparing the two periods investigated, there was less of a decline for the more recent period, compared to the earlier period. As a dispute resolution method, arbitration was considered neutral, being neither poor, nor excellent. Arbitration's standing, overall, is poor; however, for claims between £1 million and £10 million it is similar to the other methods referred to above. Positive influences towards choosing arbitration are that arbitration is private, providing fairness, allowing control of the process with an award that is final. Negative influences are that arbitration is costly, complex with procedures styled on litigation, subject to delays and confidence issues with arbitrators' decisions. Cost and duration of arbitration remain the most problematic features, however the investigation suggests that users and particularly their lawyer advisers are reluctant to implement cost saving procedures.

DEDICATION

This thesis is dedicated to my wife Sheila and to my family for their support throughout.

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CHAPTER 1 INTRODUCTION

1.0 INTRODUCTION

To give an outline understanding of what the purpose of this research is, this chapter gives the background of the research. It identifies the research problem, the aim of the research and the objectives to be followed. Justification for the research is identified, which includes an outline of the contribution to knowledge that this thesis makes. An overview of the methodology is given, including data collection methods and the analytical process that has been used. An outline of the thesis is given.

1.1 RESEARCH BACKGROUND

The construction and engineering industry is a massive industry, which when taken together with other allied industries, such as manufacturing products and extraction of minerals to serve the construction industry, is so large that it has an influence on the economy of the country. According to published figures[1], the output of the construction industry, both public and private, amounted to £113.57 billion. From the same source, the manpower is listed at 1.8 million. The industry is however renowned for its conflicts between the parties[2] and these can affect the economy of the industry and also the country. When looking at an industry of this size with the vast number of contracts that exist at any one time, if only a small percentage of those contracts result in a dispute this would result in a large number of disputes. Unfortunately for the industry, there are many areas from which a dispute can arise. A contract to carry out construction works may well have provisions for dealing with variations required by the employer, but problems can arise due to different interpretations of those provisions by the parties to the contract. There can be claims due to breach of the terms of the contract by a party, that is, a party has failed to meet an obligation under the terms of the agreement. Further, there can be claims in tort, which is where the claim is not

1 Office of National Statistics. http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-381427described. Accessed 23/01/2016

2 Lathem, M. (1994) Constructing the Team, *Final Report of the Government / Industry Review of Procurement and Contractual Arrangements In The UK Construction Industry* : HMSO, London

under the contract, but due to a common law obligation, such as claims in negligence. Additionally, sometimes parties allow work to start without a contract in place and disagreements can occur, resulting in a claim. Each of these broad areas of possible claims liability can be split into a number of subgroups, emphasizing the huge problem that the construction industry has with claims.

In modern times the majority of domestic disputes in the construction industry were traditionally resolved by either arbitration or litigation[3]. There have also been many alternative methods produced to deal with construction disputes and Fenn *et al*[4] refer to many of the available methods. The concept of arbitration is not new and in one form or another has been in use for millennia[5]. Arbitration in England, Wales and Northern Ireland was updated and consolidated by the Arbitration Act 1996 (AA). This Act provided for a considerable amount of party autonomy, allowing the parties, to a great extent, to have the type of arbitration that suits their particular requirements for the resolution of their dispute. The AA, in default of the parties agreeing a particular matter, provides for considerable powers to be given to the arbitrator. In addition s.33AA places the arbitrator under a mandatory obligation to adopt suitable procedures for the arbitration, to allow the parties to present their cases and deal with the other party's case and to have regard to the duration and cost of the arbitration. Arbitration should therefore provide an ideal system of resolution for construction disputes. It has however come under much criticism for being costly and time consuming[6] with mainly anecdotal evidence suggesting that construction arbitration is in decline[7]. Notwithstanding arbitration

3 Tackaberry, J. (2009) Adjudication and Arbitration : The When and Why in Construction Disputes. *Arbitration* . Vol 75, No.2. p.236

4 Fenn, P., O'Shea, M. and Davies, E. (1998) *Dispute Resolution and Conflict Management in Construction an International Review.* London & New York: E & FN Spon:. p.873

5 Roebuck, D. (2000) 'Best to reconcile': Mediation and Arbitration in the Ancient Greek World. *Arbitration* Vol.66 issue4 pp 275-287

6 Lathem, M. (1994) Constructing the Team, *Final Report of the Government / Industry Review of Procurement and Contractual Arrangements In The UK Construction Industry* : HMSO, London; Brooker, P. (1997) *Factors which impact on the choice of alternative dispute resolution in the construction industry.* Ph.D. Thesis, Oxford Brooks University; Ramsey, V. and Critchlow, J. (2007) Arbitration in *Construction Law Handbook.* Eds. Ramsey, V. , Minogue, A., Baster, J., O'Reilly, M. London: Thomas Telford Publishing p.807; Baynon, K.S. (2005) *Dispute Resolution and Access to Justice with Particular Reference to the Construction Industry in the United Kingdom.* Ph.D. Thesis, University; Uff, J. (2005) *Construction Law.* 9th. Ed., London : Sweet and Maxwell p. 62

7 Gaitskell, R.(2005) Current Trends in Dispute Resolution. *Arbitration* Vol.71, No.4 p. 291 Newman, P. (2008) A fillip for arbitration. *Construction Law.* Vol.29, Issue 1

inflicting difficulties upon itself, the introduction of statutory adjudication under the Housing Grants, Construction and Regeneration Act 1996 (HGCRA) as amended by the Local Democracy, Economic Development and Construction Act 2009 (LDEDC) has made statutory adjudication a popular choice for resolving construction disputes[8]. Further, the courts have introduced reforms[9] which have not only made the courts more efficient with case management, but have also promoted the use of alternative dispute resolution[10] in order to assist settlement rather than continuing the court action. Whilst parties are not restricted in the method of dispute resolution in trying to achieve a settlement rather than litigate, generally it is mediation that is referred to. In addition parties may chose mediation as their preferred method rather than any other method, including the courts. Arbitration therefore has to compete with the courts, statutory adjudication and mediation in addition to all of the other methods of dispute resolution. The questions that arise are: (i) how have all these significant developments affected trends in the use of construction arbitration? (ii) does arbitration still have a place in dispute resolution in the construction industry and if so, how does it compare to the other available methods? (iii) what are the factors that influence the choice of arbitration? and (iv) what are the factors that Arbitrators, Users and their Lawyer representatives consider make for an effective arbitration?

Brooker[11] (1997) researched into alternative dispute resolution in the construction industry and the factors that influenced contractors' choices. Whilst the research was geared to alternative dispute resolution, that is any system other than arbitration or litigation; it did include questions relating to arbitration. Those

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8 Uff, J. (2005) *Construction Law.* 9th. Ed., London : Sweet and Maxwell. P 63; Draper, M., (2007) Arbitration being left to the big battalions. *Construction Law* Vol. 18 (4); Newman, P. (2008) A fillip for arbitration. *Construction Law.* Vol.29 Issue 1, See also the statistical evidence gathered by Glasgow Caledonian University Adjudication Reporting Centre which shows the increase of the use of statutory adjudication.

9 Lord Woolf, Access to Justice 1996 www.dca.gov.uk/civil/final/contents.htm and LJ Jackson .Civil justice reforms www.justice.gov.uk/civil-justice-reforms

10 CPR Part 1 1.4(e) encourage parties to use alternative dispute resolution procedures --- under the courts duty to manage cases.

11 Brooker, P. (1997) *Factors which impact on the choice of alternative dispute resolution in the construction industry.* Ph.D. Thesis, Oxford Brooks University

questions were concerned with the cost of arbitration and whether arbitration was a satisfactory procedure for settling construction disputes. The results showed that a high percentage of respondents considered that the cost of arbitration was high, but there was nothing conclusive either way regarding the respondent's view as to the question of the suitability of arbitration as a method of solving disputes in the construction industry (p144). Brooker also investigated the suitability of different methods of dispute resolution over varying values of claim. This resulted in respondents considering conciliation, mediation and adjudication suitable for lower level claims, with arbitration and particularly litigation for higher value claims. The participants supplying data in Brooker's research were from main contractors and sub-contractors/specialist contractors. Brooker's thesis is dated June 1997 and as the AA came into force on the 1st. January 1997 there would be little experience of its effect, it is therefore considered that it is necessary to update the evidence underlying Brooker's conclusions. Moreover, statutory adjudication under the HGCRA did not come into force until May 1998, hence reference to adjudication by Brooker will not be statutory adjudication under the HGCRA. Black and Fenn[12] examined construction arbitration in the UK in 1997. The sample was obtained from appointing bodies and involved only arbitrators, providing both quantitative and qualitative data. They concluded that arbitration had a tendency to follow court style proceedings. The research by Black and Fenn also came on the cusp of the AA and preceded the HGCRA and therefore does not help answer the questions arising from the preceding paragraph.

Beynon[13] examined the dispute resolution methods of arbitration, adjudication and litigation as used in the construction industry and whether they complied with access to justice. The reference of access to justice is based on eight criteria given by Lord Woolf (1995) in an interim report to the Lord Chancellor and being part of the process of the proposed revision of court procedure. Empirical data was collected using separate questionnaires relating to arbitration, adjudication and litigation. The questions were mainly related to the process of the systems and

[12] Black, M. and Fenn, P. (1999) Survey of construction arbitration in the United Kingdom. *Arbitration* Vol.65 Issue 3 pp 217-226.

[13] Beynon, K.S. (2005) *Dispute Resolution and Access to Justice with Particular reference to the Construction Industry in the United Kingdom.* PhD Thesis. University of Wales, Cardiff.

the results analysed to determine whether or not there was compliance with Woolf's criteria. This main thrust of Beynon's study would not answer the questions raised two paragraphs ago, however there were questions relating to some aspects of cost and duration of arbitration and adjudication. With respect to arbitration, Beynon concluded that it was costly and slow. These factors of arbitration would fall within the questions raised above. In Beynon's research however, the sample for both arbitration and adjudication was from those conducting arbitration and adjudication. It is submitted that these participants are not from the best population for considering cost and duration and a wider approach is needed. Further, the information resulting in Beynon's conclusions need updating.

More recent research was conducted by Reynolds[14] in 2014 regarding the use of arbitration in England. As Reynolds's study was in 2014, this overlaps the period of study for this thesis. Data in the study by Reynolds was obtained from institutional data and by questionnaires (11 returned) and interviews with arbitrators. Reynolds's research does answer some of the questions raised above, but mostly by considering arbitration generally, rather than only construction arbitration. Therefore, the study by Reynolds needs considerable extension to provide answers for construction arbitration. Reynolds concluded[15] that there is a perceived decline in arbitration, with an upward trend in the use of arbitration. Time, cost and litigation-like procedures are considered as detracting from arbitration. Lack of quality and skill of arbitrators is cited as being a cause of decline in construction arbitration, although there is no information of what exactly is meant by quality and skill. It is perceived that lawyers have contributed to the decline by making arbitration too much like litigation. Additionally, that mediation and adjudication are preferred rather than arbitration for the lower levels of claim, but there is no detail as to what these levels are. All of these features of arbitration referred to by Reynolds require expanding, not only to reflect construction arbitration, but also by extending the type of informant. There have been other

[14] Reynold, M. (2014) An overview of the use of arbitration in England. Centre for Socio-Legal Studies; Oxford University

[15] Reynolds, M. (2014) ob cit pp 29-33

investigations, generally related to international arbitration and referred to in the Literature Review chapter.

Considerable changes have taken place to influence potential disputants in their choice of method to resolve disputes in the construction industry, which has raised questions that need to be answered. The current state of research in the area of these questions indicates that there is a need for updating and extending knowledge. The effect of these changes on the use and trend of construction arbitration is needed. Further, there does not appear to be any recent empirical data relating to the factors that affect users and their lawyer advisers in a positive or negative way in their considerations whether to choose arbitration. Moreover, there does not appear to be any recent study involving all the main parties to arbitration, that is, the arbitrator, lawyer advisers and the parties, as to their opinion of the importance of features of arbitration influencing the effective running of the process. For these reasons further study in the areas identified is required.

1.2 AIM OF THE RESEARCH

The principle aim of this research is to explore the extent to which construction arbitration continues to have a role following the Arbitration Act 1996.

1.3 JUSTIFICATION FOR THE RESEARCH

As referred to in section 1.1 above, the construction industry is an important part of the economy of the country, but subject to conflict between the various parties involved in the construction industry and arbitration is an important method of dispute resolution. It provides the parties with a high level of procedural natural justice, giving parties a reasonable opportunity of presenting their case and dealing with that of their opponent. Save for matters of public policy, the decision is final and binding upon the parties and the appeal procedures are onerous on the

appealing party[16]. It is a method that, due to the reforms of the AA and providing for party autonomy, potentially allows the parties to have the type of procedure that best suits their dispute. Despite these attributes, anecdotal evidence and some limited research suggests that arbitration is in decline and investigation is required into the use of arbitration, where it might be considered a viable option and the strengths and weaknesses of construction arbitration.

There is only limited empirical evidence relating to the perceived decline and trend in the use of arbitration in the construction industry and this research has investigated these issues. The research has investigated the extent of the use of arbitration and the circumstances in which it may likely be chosen, which appears to be new knowledge and is of assistance to institutions and arbitrators in the promotion of arbitration. Assessing the factors that influence positively or negatively the choice of arbitration and the importance or otherwise of features influencing the effectiveness of arbitration are also new knowledge and allows all concerned in arbitration to take action to improve arbitration as a method of solving construction disputes. Additionally it has allowed the determination of those features that are not being used to their full extent in controlling duration and cost. This provides an extension to previous studies and identifies a causal link between the use of some of the procedures of arbitration and duration and cost remaining high.

As the research brings new knowledge and extends existing knowledge in respect of understanding, to a greater degree, the various aspects of arbitration outlined above, there is justification in researching this important dispute resolution method.

1.4 METHODOLOGY

The research methodology for this study is based on a pragmatic perspective, which is not set in one world view, but allows whatever system of research

16 See section 2.5.3.3

necessary to address the research problem. The study therefore uses a postpositive perspective which is a quantitative approach and also phenomenology, which is a qualitative approach. Initially, an in depth literature review was carried, which indicated the AA, that was expected to resolve the former problems, had not remedied the concerns. In order to understand why the criticisms appeared to continue, it was necessary to obtain data of what features of arbitration had a negative or positive effect on choosing arbitration and the level of importance of features making up the procedures of the arbitral process. To obtain these data structured questionnaires were sent to construction arbitrators, construction lawyers and industry (users) and supported using semi-structured interviews with construction arbitrators and construction lawyers.

Data analysis uses descriptive statistics together with the statistical package of SPSS to enable more complex analysis, such as factor analysis, ANOVA and several methods of significance testing.

1.5 STRUCTURE OF THESIS

There are 11 chapters making up the thesis from the introduction through to the conclusions and recommendations of the research.

Chapter 1 outlines the research problem and the current state of knowledge in respect of those problems. It lays out the aims and objectives of the study and the justification including the new knowledge that the study provides and the methodology employed to obtain the appropriate data.

Chapter 2 provides an outline of arbitration showing that it was used millennia ago. It shows the development of arbitration in England and Wales from being independent from the courts, to the courts being able to interfere with almost every aspect of arbitration, creating many problems. The AA of 1996 is described in some detail to show that there was considerable effort made to resolve the problems that had arisen with arbitration.

Chapter 3 presents a critical review of the literature, focusing on the past research into arbitration. It highlights gaps in the current knowledge and based on this, develops the research questions.

Chapter 4 is the methodology chapter which outlines the philosophical perspective used to determine the methodology. A mixed methods approach is taken with postpositive (quantitative) and interpretivist (qualitative) perspectives being used. The sampling and data collection techniques are determined.

Chapter 5 analyses demographic data of the three categories of respondent, together with analysis of data of arbitrations conducted by arbitrator respondents. Assessment is made of non-responses, response rates and the suitability of the data given by respondents.

Chapter 6 also deals with the analysis of data. In this chapter the trend and use of construction arbitration is determined, together with rating the positive and negative effect of features influencing the choice of arbitration.

Chapter 7 analyses the importance of features that have an influence on the effectiveness of the arbitral process. It also considers procedures open to respondents that can influence effectiveness, including respondents' preference of conflicting features.

Chapter 8 is the final chapter analysing quantitative data. In this chapter the suitability of arbitration as a method for resolving construction disputes is considered. This is followed by determining in what circumstances arbitration might be considered as the preferred option for resolving construction disputes.

Chapter 9 analyses interview data that provides explanations to responses in the questionnaires that are not clear, or appear to be in conflict and also expands data from questionnaires.

Chapter 10 discusses the findings of chapters 5, 6, 7, 8 and 9 to bring about an holistic view and therefore a better interpretation of all of the data and particularly so in respect of duration and cost of arbitration and the controlling of costs.

Chapter 11 provides a summary of the research and the main conclusions reached. It outlines the contribution to knowledge and the limitations of the

research. Conclusions of the research and recommendations are given, together with recommendations for further study.

1.6 DELIMITATIONS AND KEY ASSUMPTIONS

The data was collected in respect of arbitrators, the users of arbitration and their lawyer advisers and relates to England and Wales. This is because there is added difficulty in including the whole of the United Kingdom, partly because Scotland has a different set of laws governing arbitration and partly that the cost and time required would be excessive. Clearly the results are limited to England and Wales and cannot be considered as applying to the United Kingdom as a whole. In addition, it is construction arbitration that is being studied as opposed to the wider field of arbitration.

1.7 SUMMARY OF CHAPTER

This chapter lays the foundations of the thesis. It has identified the research problem and the position of current research. Justification for the research has been outlined and the aims and objectives to carry out the research shown. An outline of the methodology and the structure of the thesis are also shown.

CHAPTER 2 BACKGROUND TO ARBITRATION AND ITS DEVELOPMENT

2.1 INTRODUCTION

Continuing from the foundations of the previous chapter this chapter provides a brief background to the development of arbitration. It explains how arbitration moved from a simplistic method of dealing with disputes, to a complex and unpopular method. There follows an appraisal of the complaints leveled at arbitration prior to the passing of the Arbitration Act 1996 (AA). It considers the recommendations of the Departmental Advisory Committee (DAC), set up by the Department of Trade and Industry, to advise on a legal framework for a new Act that would reform arbitration law and also deal with the complaints against arbitration. This is followed by an assessment of how these reforms were received subsequent to the passing of the AA.

2.2 HISTORICAL DEVELOPMENT OF ENGLISH ARBITRATION

A brief history of the development of arbitration in England is included in order to show how arbitration moved from a relatively simple form of dispute resolution with little, or no, court involvement, to the complexities and court interference that brought about the need for the AA. More detailed accounts of the history and development of English arbitration are provided by Holdsworth[17]and Mustill & Boyd[18].

2.2.1 Arbitration prior to legislation

Some of the wording used below retains the style that is used by those being cited and may not read as would be expected of modern English. In England, by the thirteenth century, the development of trade brought with it the inevitable disputes between traders; such disputes were often referred to a third party to resolve or

[17] Holdsworth, W.S. (1964) A History of English Law. *in* Goodhart, A.L. & Hanbury, H.G. (Eds)*A History of English Law.* Vol. 14, London : Methuen & Co Ltd., Sweet & Maxwell

[18] Mustill, M.J.(Sir) & Boyd, S.C. (1989). *The Law and Practice of Commercial Arbitration in England.* London & Edinburgh : Butterworth

determine, usually someone with knowledge of that trade and respected by the disputing parties. These hearings were outside the jurisdiction of the courts of common law and were ruled by their own system of law, which by custom had developed into a set of legal rules[19]. Sir William Holdsworth[20] says that arbitration was common in medieval England, but that the courts considered that arbitration diminished their jurisdiction and therefore they did not look well upon them (arbitration). There is reference by Dawson[21], of the Privy Council and the Chancery in the 14th century of using arbitration and mediation, where lay persons, on behalf of the courts, conducted examinations of witnesses outside of London, not only to save time and cost to the court, but also to obtain solutions. The examiners were often people with prestige in the community, such that they were trusted to be fair. The system developed into commissions being given to lay persons to "*hear and end according to equity and good conscience".*

A guide to arbitration law, written at the end of the 15th Century[22], refers to arbitrators deciding matters according to their opinion and judgement as honest men and that the parties had submitted themselves to the arbitrator of their own accord and not by compulsion of the law. It also refers to the powers of the arbitrator being greater than judges on the basis that judges were restricted in their determinations by having to comply with the law, whilst arbitrators could use not only fact and law, but also according to their own mind. Even back in those early days there was a recommendation that every submission should be in writing and accompanied with the parties covenant or bond. The covenant or bond was to cover the award and if a party revoked the arbitrator's appointment, the bond was forfeited. As late as 1888[23] there were submissions involving bonds, where both parties executed a bond such that they had to abide by the award. Whilst the bond

19 Crowter, H. S. (1998) *Introduction to Arbitration.* London Hong Kong : LLP p3
20 Holdsworth, W.S. (1964) *A History of English Law,* Edited by Goodhart, A.L. & Hanbury, H.G. Vol. 14 pp 187-204
21 Dawson, J.P. (1960) *A History of LAY JUDGES.* Cambridge, Massachusetts, Harvard University Press. p.163-170
22 *Arbitrium Redivivam* (1694) Printed by R&E Atkins for Issac Cleebe
23 Lynch. H.F. (1888) *REDRESS BY ARBITRATION a Digest of the Law relating to ARBITRATION and AWARDS.* London : Effingham Wilson & Co. p. 11 – 12 Note: this is how the title is written.

did not limit the penalty of the award, if the bond was greater than the award, then the remainder was recoverable.

Disputing parties therefore entered into voluntary arbitrations which were outside the jurisdiction of the court. Being outside of the court's jurisdiction, there was no court enforcement of the award available. By agreement however, some parties first went to court, with the court delegating to an arbitrator to determine all or part of the dispute. This then brought the matter under the jurisdiction of the court and by 1670 the courts were prepared to treat dissent by a party as contempt of court[24]. Mustill & Boyd also consider that parties having involved the court in this way, allowed the court to intervene where it considered that the arbitrator had made a mistake, or had misconducted himself. This is on the basis that the court's mandate to the arbitrator was to run the arbitration properly and if the court considered that there were errors made by the arbitrator, they then had power to intervene, referred to by Mustill & Boyd as an inherent right.

2.2.2 Increase of the courts statutory involvement with arbitration

It was not until 1698 that the first Arbitration Act was passed, to put these developed rules and common law on to a statutory basis. This Act was described as "*an Act for determining differences by arbitration*" and came into effect on 11th May 1698. It referred to promoting trade and rendering the award of arbitrators more effectual for the final determination of controversies. It made lawful for merchants and traders and others to end a controversy, suit, or quarrel by arbitration. Parties first submitted to the court, with the matter to be finally concluded by the arbitrator or umpire. There was provision for enforcement of the award by the court and the enforcement could not be delayed unless it could be shown that the arbitrator or umpire had misbehaved themselves and the award procured by corruption or other undue means. The court therefore now had statutory involvement with the arbitration process with the power to set aside an award if it had been procured by corruption or other undue means.

24 Mustill, M.J.(Sir) & Boyd, S.C. (1989). *The Law and Practice of Commercial Arbitration in England.* London & Edinburgh : Butterworth

After the passing of the 1698 Act there were three different situations governing the court's power of intervention. Parties were free to decide whether or not they wished their arbitration to be dealt with under the 1698 Act. They could therefore choose to remain completely outside of this Act, or they could make a provision within their agreement to arbitrate, for the arbitration to be made a rule of the court under the 1698 Act, but they could agree not to implement that provision. In both of these circumstances, the common law had no jurisdiction to intervene. In cases where the parties commenced arbitration and implemented an agreement to make the submission a rule of the court under the 1698 Act, the court had the statutory power of intervention as described above. Where parties started an action in court and the arbitration flowed from the court, the court took the view that the proceeding were still under their supervision and that the court had power to interfere and set aside the award for misconduct as described in the above paragraph.

According to Parris[25], it was not until 1802 that a court set aside an award for anything other than corruption or fraud; this was in the case of *Kent v Elstob*[26]*.* The arbitrator issued his award together with an additional paper containing observations of the evidence given at the hearing and the reasons for his award. In the judgement, the three judges ruled that the paper given with the award was part of the award and that the reasons of the arbitrator did not comply with the law and therefore there was a mistake at law. All three judges ruled that the award be set aside for mistake of law. This was an encroachment on arbitral awards that Parris argued was not justified, although Mustill & Boyd[27] consider that there had always been an inherent right of the court to supervise lower tribunals.

The Common Law Procedure Act 1854 brought in what was to be known as the *case stated* procedure. Under s.4 of this Act, a judge considering that the determination of an issue rested on a question of law or fact could require the

25 Parris, J. (1983) *Arbitration Principles and Practice.* London Toronto Sydney New York: Granada Publishing Ltd.
26 (1802) East 18, 102 ER 602
27 Mustill, M.J.(Sir) & Boyd, S.C. (1989). op.cit.

arbitrator to put forward his case. Questions of law were determined by the court and the question of fact determined by a jury or a judge and the arbitrator had to have regard to those decisions. Where a submission had been made a rule of the court, the provisions in s.5 allowed the arbitrator in a compulsory reference, or with the consent of the parties, to state his award in the form of a special case for consideration by the court. The court therefore had an increased statutory power to interfere with matters of fact, law and the award, but the consent of the parties was required. The Arbitration Act 1889 repealed the Arbitration Act of 1698 and amended and consolidated the law that had evolved since the Act of 1698. Under s.1of the 1889 Act, all submissions, unless agreed otherwise, took effect as being an order of the court. This effectively brought all references under the supervision of the courts, unless there was specific agreement to the contrary. With respect to setting aside an award for corruption, the Arbitration Act 1889 changed the wording to misconduct, thereby increasing the ability of the courts to interfere with the award. This was further extended by the Arbitration Act 1934, where misconduct applied not only to the award, but also to the reference. By this time the courts could interfere, on a statutory basis, in virtually all aspects of arbitration. This situation continued up to the middle of the century, by which time there was discontent with users of arbitration regarding the powers of the courts and their ability to interfere. Such interference not only frustrated parties, but caused delay, with the subsequent increase in cost.

2.2.3 An opportunity lost to reform arbitration

The Arbitration Act 1950 (AA1950) repealed all other Acts that had not already been repealed. This therefore provided the opportunity to establish a new beginning, but that opportunity was not taken and the AA1950 re-enacted, under different names, much of what had previously been the cause of concern relating to interference by the courts with arbitration. Rutherford & Sims[28] considered the AA1950 to be illogical and not user friendly. The AA1950 therefore did not bring about the reforms to the law that users of arbitration considered necessary.

28 Rutherford, M. and Sims, J. (1996) *Arbitration Act 1996: A Practical Guide.* London: FT Law & Tax p.4

2.2.4 Curtailment of the court's powers

The Arbitration Act 1979 (AA1979) did contain measures that were designed to allay some of the fears of court intervention. It abolished what was referred to as the special case procedure[29] where the court could get involved either by request of the arbitrator or of its own volition on questions of law both during the reference and in the award. Lord Hacking[30] believed that the system had worked well, but it started to be abused by parties using it as an instrument of delay, which caused great concern, particularly to foreign parties, who were not necessarily bound to England as the place to have their arbitration determined. The problem was that nothing could progress until the court had given their decision on the question of law[31]. The AA1979 also allowed the parties to agree to exclude appeals on questions of law arising out of the award[32]. Furthermore it took away the High Court's jurisdiction to set aside or remit an award on the grounds of errors of fact or law on the face of the award[33]. This therefore removed a considerable amount of the power granted to, or assumed[34], by the court. It did however provide for certain other powers relating to the award, that allowed court intervention, but on a much more restricted basis[35]. This Act brought about significant reforms, as referred to above, but there still remained many aspects of arbitration that required reforming, or at least clarifying. For example, there was uncertainty as to whether an arbitrator could conduct the arbitration other than by the strict rules of law. In addition there was a considerable amount of case law that had come about over the years and this made it difficult for users of arbitration, as they may not be familiar with the volume of cases that had reached the courts, particularly those who were not trained in the legal profession. Further reforms were therefore necessary.

29 AA1979 s.1(1)

30 Hacking, Lord. (1980) "Stated Case" Abolished: UK Arbitration Act 1979. *The International Lawyer*. P.98

31 Diplock, Lord. (1978) Fourth Alexander Lecture: Case Stated- its Use and Abuse. *Arbitration* Vol.44, Issue 3 p.109

32 AA 1979 s.3

33 AA1979 s.1(1)

34 The case of *Czarnikow & Co v Roth, Schmidt & Co* [1922] 2 KB 478 confirmed the court's attitude that a provision contained in an arbitration agreement that ousted the court's authority in respect of a question of law was against public policy and therefore invalid.

35 AA1979 s.1(4) & s.2(2)

2.3 CRITICISMS OF ARBITRATION PRIOR TO THE ARBITRATION ACT 1996

Despite these attempts to improve arbitration through statutory reform, criticism continued from users of arbitration.

2.3.1 Perception of arbitration as slow and expensive

The Latham report[36] was commissioned by government and industry to report on the state of the construction industry and particularly the flow of money between the respective parties. The final report was a review of the construction industry's procurement and contractual arrangements. It brought about the Housing Grants, Construction and Regeneration Act (HGCRA), however in the report there was criticism of arbitration. It referred to the industry's perception of arbitration as complex, slow and expensive[37]. This was based on consultation with industry and those associated with arbitration and whilst statistics were not presented, it can be taken as real evidence of dissatisfaction with arbitration. Harris[38], when considering his early experiences, spanning from the 1980's, says that the perception of construction arbitration was that it was "*cumbersome and expensive".* Bernstein[39] considered that arbitration, if conducted on the lines of litigation, would be more expensive than litigation as the room hire and the fees of the arbitrator have to be paid for, whereas in litigation the court room and the Judge are free. Bernstein also contends that as the procedures are similar in both circumstances, there will not be any savings in procedural costs.

2.3.2 Arbitration considered too much like litigation due to lawyer involvement

There were many critics of arbitration, Sir John Donaldson[40] referred to arbitration as litigation in the private sector. Bernstein[41] pointed out that if parties were

[36] Latham, M. (1994) Constructing the Team, *Final Report of the Government/Industry Review of Procurement and Contractual Arrangements in the UK Construction Industry.* HMSO : London
[37] Latham, M. (1994) op. cit. p.90
[38] Harris, B. (2009) Maritime Disputes: Now and in the Future. *Arbitration* Vol 75, No. 2. p.231
[39] Bernstein, R. (1987) *A Handbook of Arbitration Practice.* London: Sweet & Maxwell p.10
[40] *North Regional Health Authority v Derek Crouch Construction Co. Ltd.* [1984] QB 644
[41] Bernstein, R. (1987) op.cit. p.10

represented by lawyers and the arbitrator allowed it to happen, that the lawyers would opt for methods similar to litigation. Goode[42] said "*all too often arbitration is as adversarial as litigation – is merely litigation in a somewhat more relaxed form*". Allen & Reynolds[43] also refer to arbitrators being pushed into an adversarial system by lawyers and that construction arbitration can take as long as litigation. It was said by Flood & Caiger[44] that lawyers involved in construction arbitration tried to turn technical discourse into legal discourse in an attempt to "*capture"* it as being a legal matter, thereby attempting to make the process more legalistic. It was thought by Kerr[45] that too much arbitration was conducted too formally and was more akin to litigation. He considered that it was not only necessary to have a good arbitrator, but also the appropriate procedure for the particular case.

2.3.3 Perception there was too much court intervention in arbitration

There was also concern that the courts were too easily able to intervene, although the AA1979 had taken away much of the court's ability to interfere. However, there remained those who considered that the court's should not be able to intervene in the award at all, as this made a situation where the award was not final. Lord Mustill in the first report of the Departmental Advisory Committee (DAC), also referred to there being disquiet by both English and foreign parties that the courts were able to interfere with the arbitral process and the award[46]. This was also considered by Sheriden[47], who refers to the consultation period for the DAC reports, that there were those who wanted a policy that did not allow the courts to intervene whatsoever. Reference was made by Blake *et al*[48] that the AA1950 gave excessive powers to the courts and lacked guidance regarding procedures. In

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42 Goode, R. (1998) Dispute resolution in the twenty-first century. *Arbitration* Vol.64 No. 1

43 Allen, W. & Reynolds, M. P. (1989) *Arbitration* Vol. 55 No. 2 pp. 133,134

44 Flood, J. & Caiger, A. (1993)Lawyers and Arbitration: The Juridification of Construction Disputes. *The Modern Law Review.* Vol 56 p. 414

45 Kerr, M. (1987) Forward. *A Handbook of Arbitration Practice.* London: Sweet & Maxwell : pp 3-6

46 Mustill, Lord Justice (1989) Departmental Advisory Committee on Arbitration Law. Her Majesty's Stationary Office: London p.p. 5-7. The DAC was set up by the Department of Trade and Industry to report on arbitration law. There were two reports, the first by Lord Justice Mustill and the second by Lord Justice Saville

47 Sheridan, P. (1999) *Construction Engineering Arbitration.* London: Sweet & Maxwell: p. 395

48 Blake, S., Brown, J & Sime, S. (2011) *A Practical Approach To Alternative Dispute resolution*. Oxford: Oxford University Press: p.372

addition there was a general feeling that awards in England were likely to end up in the High Court and therefore were not final[49].

2.3.4 Arbitration was perceived as too complex

Redfern & Hunter considered that modern arbitration had lost the simplicity that it once had, becoming more complex, legalistic and institutionalised[50]. The AA1950 was subject to later amendments contained in the Arbitration Acts of 1975 and 1979, the Supreme Court Act 1981 and the Administration of Justice Act 1982. Stephenson[51] points out that this resulted in the fragmentation of the legislation governing arbitration, making it difficult for lay people to follow, thereby creating a greater need for legal representation.

2.4 THE DEPARTMENTAL ADVISORY COMMITTEE (DAC) AND THE ARBITRATION ACT 1996

The DAC under the chairmanship of Lord Justice Mustill was set up to report on arbitration law in England, Wales and Northern Ireland. The criticisms of arbitration referred to above were well known, but the committee also consulted industry and others who had an interest in arbitration, for their comments. It was then for the committee to put forward proposed legislation to deal with the complaints raised. The first report was published in 1989 under the chairmanship of Lord Justice Mustill (as he then was) and this lead to a draft Bill being circulated in 1994 which was not well received[52]. Under the chairmanship of Lord Justice Saville (as he then was), a second draft Bill was circulated for public consultation in July 1995 and this led to the final draft Bill in February 1996. This ultimately resulted in the passing of the AA in June 1996, coming into force on 31st. January 1997[53] and applied to England, Wales and Northern Ireland. References below to the DAC are

49 Uff, J. (2005) *Construction Law.* 9th. Ed., London : Sweet and Maxwell

50 Redfern, A & Hunter, M. (1991) *Law & Practice of International Commercial Arbitration.*2nd. Ed. London: Sweet & Maxwell

51 Stephenson, D.A.(2001) *Arbitration Practice in construction contracts*. 5th. Ed. Oxford: Blackwell Science. p.3

52 DAC (second report) Para. 14

53 The Arbitration Act 1996 (Commencement No. 1) Order 1996 (SI 1996 No. 3146)

in respect to the second report of February 1996 unless otherwise stated. The report of the DAC followed the features that are laid out in chapter one of the DAC report[54].

2.4.1 The DAC and the Model Law

One feature refers to the Model Law hence some explanation is required as to what the Model Law is. Due to the amount of international trade taking place, there was an interest in developing a set of arbitration rules to provide a means of dealing with disputes on an international basis. In 1976 the General Assembly of the United Nations set up the United Nations Commission on International Trade Law (UNCITRAL) who determined, as an international standard, a set of Arbitration Rules. In 1985 UNCITRAL produced what is referred to as the Model Law on international commercial arbitration. This was a system of law relating to arbitration that could be adopted by a country in whole, or in part, to provide for its own arbitration law. The Model Law was a matter considered by the DAC, but it was recommended by the DAC in its first report that it should not be limited to the subject matter of the Model Law and this recommendation was continued into the second report[55]. Whilst the DAC did not adopt the Model Law, it had regard to the Model Law throughout, incorporating the same structure and language in order to make it more comprehensible to those familiar with the Model Law[56].

2.5 THE AA REFORMS AND THE RECOMMENDATIONS OF THE DAC FOR DEALING WITH ARBITRATION'S PROBLEMS

2.5.1 Complexity of the law governing arbitration

The DAC were aware of the complexity of arbitration with several statutes and considerable case law being involved. They therefore determined that their recommendation for the new Act would be that it was written in clear and non-technical language, free from technicalities and in a logical order, such that it was

[54] DAC Para. 1(1-7)
[55] DAC Para.1((5)
[56] DAC Para. 1(7)

comprehensible to the layman[57]. They also considered that the new Act should, as far as possible, have the same structure and language as the Model Law, thus enabling those familiar with the Model Law to understand the new Act[58]. The AA was therefore modelled on these lines. Furthermore it consolidated existing arbitration law and incorporated important elements of common law[59]. Not only did the AA follow a logical order, it also supplied a procedural code for conducting arbitration and this was a further step in making the AA more easy to follow. It is arguable therefore that the AA took away much of the complexity and confusion that existed prior to the passing of this Act.

2.5.2 Matters affecting duration and cost of arbitration

The duration of arbitration has a direct effect on the costs of the arbitration and particularly so if the parties are professionally represented. For this reason costs and duration are considered together.

2.5.2.1 Principles governing the AA

The AA starts with s.1 setting out the general principles of the AA and this in itself, potentially, provides the basis for dealing with much of the criticism of arbitration. It requires that arbitration should be fair, impartial and avoid unnecessary delay and expense[60]. The DAC stated that these principles are aspects of justice and that all of the AA should be read with these principles in mind[61]. The second principle is that of party autonomy, which was in line with the Model Law at that time. The DAC recommended that as arbitration was the choice of the parties that they should be responsible for how it is conducted, subject to those matters that are considered as in the public interest[62]. The DAC considered the mandatory sections assists the arbitral process, despite making inroads into party autonomy. Through party autonomy, should they be able to agree, the parties can have the kind of

[57] DAC Para.1(3)
[58] DAC Para.1(7)
[59] DAC Para. 1(1)
[60] AA s.1(a)
[61] DAC Para. 18
[62] DAC Para. 19

arbitration that best suits the circumstances, including matters affecting duration and cost.

2.5.2.2 Duties of the arbitrator

Whilst s.1 is not mandatory, the duty of the arbitrator under s.33 is. This section puts an obligation on the arbitrator to act fairly and impartially, avoiding unnecessary expense and delay. There is therefore an obligation on the arbitrator to devise a procedure that complies with these facets of justice. There is also a specific requirement for the arbitrator to have regard to the particular case and include in the procedure the ability for the parties to deal with their case and that of the other party. Section 33 therefore not only provides for natural justice, requiring the arbitrator to be fair and impartial, but makes it an obligation to avoid unnecessary delay and expense. The DAC goes into considerable detail as to why they recommended these reforms[63].

Moreover, the obligation to have regard to the actual case being determined is a further factor in which the issues of delay and expense play a part. For example, if a case is one that can be properly dealt with by the parties submitting their case in document form, without an oral hearing, usually referred to as documents only, then this would be cheaper and quicker than conducting a full blown procedure requiring preliminary and interlocutory meetings and an oral hearing. It is therefore suggested that if a case arises where using a documents only procedure would be appropriate, the arbitrator would be in breach of his s.33 duty to implement a full procedure that was long and expensive. The arbitrator should therefore have regard to the nature of the dispute and put forward a procedural method that is tailored to fit the circumstances[64].

[63] DAC Paras, 150 - 165
[64] DAC Para. 151

2.5.2.3 Conflict between the duty of the arbitrator and party autonomy

The DAC recognised the possible conflict of the duty of the arbitrator under s.33 and that of party autonomy under s.1[65]. If the parties require a certain way of dealing with the arbitration and they agree a particular procedure for the arbitration, or part thereof, then their wishes override any conflicting methods or procedures preferred by the arbitrator[66].

2.5.2.4 Opportunity for a party to present their case

Parties can present their case themselves, but it would be more usual to be represented by a lawyer or claims consultant. A decision by the Supreme Court[67] held that advice given by solicitors to clients that is privileged does not extend to advice given by others outside of the legal profession and this may have an influence on who parties select to advise them. The DAC deliberated between the parties being given a *full opportunity* to present their case, as in Article 18 of the Model Law or a *reasonable* opportunity[68]. They took the view that they preferred the *reasonable* approach in order to stop a party from considering that they had whatever amount of time that they wished to take in presenting their case. It might be thought that this view reduced the quality of justice, however in practice it is possible that it can provide for better justice. For example, a party with considerable resources could intimidate a weaker party by deliberately manipulating the procedural process, asking for additional meetings that might not be necessary and prolonging the oral hearing with matters that, in effect, do not further their case. Such a prolongation of time has a direct effect on costs to both parties and the weaker party, in fear of having to pay higher costs should he lose, may withdraw from the arbitration, even though they might have a reasonable case. The arbitrator does have to allow reasonable opportunity for parties to deal with the case, but has to have regard to excesses by a party.

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65 DAC Paras. 154-163
66 DAC Para. 157
67 *Prudential & Another v Special Commissioner for Income Tax & Another* [2013] UKSC 1
68 DAC Para. 164 &165

2.5.2.5 Consideration of procedural and evidential matters by the arbitrator

Section 34 AA provides for a number of procedural and evidential matters that the arbitrator might consider. This adds certainty to the ability of the arbitrator to run the arbitration in a manner that best suits the case and reinforces, through the AA, that the arbitrator has such powers. The list of matters contained in s.34 is not a closed list and the arbitrator can use other methods that enable him to comply with the obligations of s.33. This was an important matter considered by the DAC[69]. There is therefore the power for the arbitrator to have regard to those procedural matters that have an effect on the duration and cost of the arbitration. Section 34 is not mandatory and whilst it requires the arbitrator to decide all procedural and evidential matters, the right of the parties to agree any matter is maintained.

2.5.2.6 Duty of the parties to assist the arbitral process

In order to assist the arbitration to proceed in an expeditious manner, there is in s.40, a statutory obligation for the parties to comply "*without delay"* with orders and directions of the arbitrator, including procedural matters determined by the arbitrator. The DAC considered that the provision should be mandatory[70], thereby not allowing parties to contract out of the obligation. This is an attempt to get the parties to act quickly, thereby reducing the duration and cost of the arbitration. Whilst the section is mandatory, there is little the other party or the arbitrator can do should a party not fully comply *"without delay".*

2.5.2.7 Sanctions against a party for default

If a party does not comply with an order or direction, the provisions of s.41 enables the arbitrator to apply sanctions against the defaulting party. It is usual for arbitrators to give reminders before implementing sanctions, such that they cannot be accused of breaching natural justice and their obligations under s.33. The DAC was of the opinion that a party should proceed with the arbitration in a reasonable manner and suggested procedures that allowed the arbitration to continue should

[69] DAC Para. 166
[70] DAC Para. 204

a party default[71]. Section 41 provides facility for the arbitrator to take certain action in the event that a party does not proceed with the arbitration as ordered by the arbitrator. The provisions of this section are intended either to close the arbitration, or allow the arbitration to continue despite the default of a party. There are two situations where the arbitrator may bring the arbitration to a close under s.41. The first is where a claimant opens arbitral proceedings, but then does not progress the arbitration and if the arbitrator is satisfied that the conditions required by the AA are satisfied, he may then issue an award dismissing the claim[72]. The intention of the AA is that a claimant once having started arbitration should not be allowed to sit back and let time pass, thereby leaving the respondent in a position that is unresolved. Such a delay may not involve additional cost, but it could consume considerable time, particularly if the claimant lets the matter lapse until just before the end of the contractual or statutory limitation period, which could be several years.

The second situation is where a claimant ignores a peremptory order to supply security of costs in which case the arbitrator may issue an award dismissing the claim[73]. A peremptory order is an order that provides a last chance to comply with a previous order or direction that has been ignored by the party and the peremptory order specifies what will happen if the order is not complied with. The main issue is that the respondent, who has been forced into arbitration, suspects that if he wins, the claimant would not be in a position to make the payments ordered in the award. Clearly if a claimant was not able to pay should he lose the case, then there is considerable effect on costs to the respondent, who may lose out in respect of the award itself and may also have to pay his own costs. The security of cost issue therefore has an effect on costs generally and s.41 gives facility to deal with the matter.

[71] DAC Paras. 206 - 211
[72] AA s.41(3)
[73] AA s.41(6)

The general problem of a party not attending meetings or submitting written details is dealt with in s.41(4). This section allows the arbitrator to continue with the arbitration, subject to the defaulting party not having a satisfactory reason for the default. Where a party fails to comply with other kinds of peremptory orders, other than that of security of costs, this is dealt with by s.41(7)(a-d). This sub-section allows the arbitrator to take any one or all of four options. He may disallow any allegation or material that was subject to the order; he may draw inferences from the non-compliance; he may proceed to the award without that material and he may penalise the defaulting party with a cost order. These powers of the arbitrator are an important element in the control of duration and cost of arbitration. Further, assistance in respect of a party not complying with a peremptory order can be obtained from the court[74], subject to the parties not agreeing to exclude this provision.

2.5.2.8 Recoverable Costs by parties involved in the arbitration

The general principle of costs is that the winning party get their costs paid by the losing party, usually referred to as "*costs following the event*". This principle is to be used unless there are circumstances where the arbitrator considers that the principle should not be followed[75]. Lord Woolf MR[76] considered that too robust application of this principal encourages litigants to increase the cost as they are not selective in the points they wish to make. The arbitrator can therefore have regard to such matters as the general attitude of a party, whether there has been time wasting on an exaggerated claim, whether a party has pursued part of a claim that has no merit and the like. If the arbitrator has regard to the above matters, rather than just looking at who has won, this can be a factor that makes costs fairer. It may also influence a party not to pursue issues that are unlikely to succeed, thereby saving time and cost. Moreover the AA distinguishes between costs incurred and the actual costs that can be recovered[77]. For example a party might engage senior counsel in a case that is technically simple and the arbitrator

[74] AA s.42
[75] AA s.61
[76] *AEI Rediffusion Music Ltd v Phonographic Performance Ltd* [1999] 1 WLR 1507
[77] AA s.63

may allow only the cost that would have been incurred had it been junior counsel. Implementing a difference between actual costs incurred and what costs can be recovered should have an influence on costs and may also affect the duration of arbitration.

2.5.2.8 The effect of the provisions controlling duration and cost

From the above it can be seen that the AA has put in place many provisions that assist the arbitrator to deal with recalcitrant parties. It also provides for the arbitrator to award costs on the basis that he thinks fair and appropriate. All these provisions therefore have a bearing on the cost and duration of arbitration and if implemented robustly, these two elements can be kept under control. The DAC recommended party autonomy and considered that the arbitrator could not override the agreed will of the parties[78]. Therefore, with party autonomy, the arbitrator may be restricted and this will be a matter that the thesis will review.

2.5.3 The problem of too much court intervention in the arbitral process

As referred to, there was much concern that the courts were too ready to interfere with the arbitral process and the award. There are many sections of the AA that involve the courts, but this discussion is limited to questions of law raised during the arbitration, question of law arising out of the award and procedural matters affecting the award, as these were the areas of concern with arbitration as discussed above. The AA commences in s.1(c) limiting court intervention only to those provisions that allow court intervention in Part 1. This in itself is a limitation of court intervention, although the wording is that the court "should not" as opposed to "shall not" intervene. Furthermore none of these provisions allow the court to unilaterally intervene as all the provisions require a party to involve the courts. It was considered by the DAC that the provisions relating to the courts were one of support to arbitration and not of intervention[79].

[78] DAC Para. 173
[79] DAC Para. 22

2.5.3.1 Consideration of a preliminary point of law raised during the arbitration

One of the main areas of concern was the ability of the court to be involved with questions of law. The AA retained the facility for a party to have the court determine a preliminary point of law[80]. The DAC considered that the provision is useful and suggested that a determination of a point of law can help to bring a speedier conclusion to a particular arbitration and could be useful where a determination would assist a large number of arbitrations that involved the same point of law[81]. The parties can agree that this provision will not apply and the court be excluded. Even if the parties do not exclude this provision, there are a number of conditions that apply that make an application to the court more difficult to succeed. Before the court can consider the application it has to be satisfied that there will be a substantial saving in costs and that the application was made without delay[82]. The court must also be satisfied that the question of law substantially affects the rights of one or more of the parties[83]. The situation therefore is very restrictive and application to the court merely as a delaying tactic is unlikely to succeed.

2.5.3.2 Consideration of errors of law arising out of the award

With respect to errors of law arising out of the award, the AA continued the facility for a party to raise objection[84]. The DAC considered a number of responses from their consultations that there should not be any right of appeal on the substantive issues in the arbitration. Such responses held that the parties had chosen arbitration as the method of resolving their dispute and not the court. The DAC put forward the argument that the arbitrator was under an obligation to deal with the arbitration under the law chosen by the parties and if he did not do so, the result would not be what was intended[85]. The parties however can agree to exclude the court if they wish to do so and in any event should the parties agree to dispense

[80] AA s.45
[81] DAC Para.218
[82] AA s.45(2)(b)
[83] AA s.45(1)
[84] AA s.69
[85] DAC Para. 285

with a reasoned award; this is taken as agreement to exclude the court on matters of law[86]. In the event that they do not agree to exclude the court, there are a number of conditions contained in the AA that make a successful application to the court very difficult.

An aggrieved party has 28 days, from the date of the award[87], in which to appeal. This in itself stops a party from procrastinating if it intends to appeal. In addition before the court can grant leave to appeal, it has to be satisfied that the determination will substantially affect one or more of the parties and that the question was one that the arbitrator was asked to determine. The DAC referred to the situation where previously a disgruntled party, having lost their case, might make an application under a point of law that was not raised in the process of the arbitration and that to allow this to occur would be a step backward to old practices[88]. A further requirement is that based on the finding of fact by the arbitrator, the decision was obviously wrong[89], or the question is of public importance and the decision of the arbitrator is in serious doubt and considering the circumstances it is just and proper for the court to determine the question[90].

These restrictions are quite substantial and will no doubt restrict application on questions of law. They have not, however, completely stopped parties from raising questions of fact, which are not reviewable, as questions of law, which are reviewable. The courts however are well aware of this ploy and Mr Justice Akenhead in *Penwith District Council v V.P. Developments Ltd*[91] said that parties should not go to the court on apparent questions of law when in reality they are questions of fact and that the court will not treat an incorrect finding of fact as a question of law. The courts are therefore supportive of the AA and whilst there remains the facility to appeal, the restrictions and the court's support make such applications difficult to succeed. If parties wish to exclude the court on matters of

86 AA s.69(1)
87 AA s.70(3)
88 DAC Para. 286(ii)
89 *Coal Authority v Davidson* [2008]EWHC 2180 (TCC) In this case the arbitrator applied the wrong law to the facts found.
90 AA s.69(3)
91 Penwith District Council v V.P. DevelopmentsLtd. [2007] EWHC 2544 (TCC) Para. 23

law during the arbitration or arising out of the award, then they are at liberty to do so. They do however have to be quite specific that it is their intention to exclude the courts; the wording that the award "shall be final, conclusive and binding on the parties..." was considered by Mrs Justice Gloster to be insufficiently clear that the intention was to exclude the court on matters of law under s.69 AA[92].

2.5.3.3 Challenging the award due to serious irregularity by the arbitrator

The AA also retained the right of a party to appeal against an award for what is known as serious irregularity. The AA does lay out a series of matters that are serious irregularities under the AA[93] and the list is closed, hence the courts do not have any power to extend the list, therefore if a subject of appeal does not fall within that list there is no right of appeal. The DAC go to some length to explain that the provision is intended to provide a remedy where the arbitrator has clearly made a mistake that is far removed from what might reasonably be expected[94]. They also make reference that the test is not related to what would have happened had the matter gone to court[95]. Furthermore, there has to be a test of substantial injustice, hence, even if there is found to be a serious irregularity on the part of the arbitrator, if there is not also substantial injustice affecting the party, the appeal will fail[96]. Moreover, appeals have to be made within 28 days from the date that the award was signed[97] and an appellant has to have exhausted any other method of review and any recourse that allows the correction of the award or the issuing of an additional award[98].

These matters themselves are quite restrictive against an appeal being successful. However, a party who raises an objection that the proceedings have not been conducted properly, or there has been failure to comply with the arbitration

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92 In *Shell Egypt West Manzala GmbH & Another v Dana Gas Egypt Ltd.* [2009] EWHC 2097

93 AA s.68((2)(a) - (i)

94 DAC Para. 280

95 DAC Para. 280

96 *London Underground Ltd. v Citylink Telecommunications Ltd* [2007] EWHC 2544 (TCC). There were numerous grounds of appeal, all failed, but in one instance an irregularity was found to exist, but it was held that there was not substantial injustice, therefore the appeal on that point failed. Para. 206

97 AA s.70(3)

98 AA s.70(2)

agreement or the provisions of Part 1 of the AA, or that there has been an irregularity affecting the arbitrator or the proceedings, must raise that objection forthwith[99], or within other specified times. As a guide to the meaning of forthwith under the AA, Harris *et al*[100] includes the words "*promptly"* and *"immediately".* There is therefore the right to appeal under serious irregularity, but the restrictions do make it difficult to be successful. In *Weldon Plant Ltd v The Commissioners for the New Towns*[101] judge Humphrey Lloyd said that awards should be read supportively and that in his opinion the principles in s.1 of the AA suggest that awards should be read such that they would be upheld. This indicates the support of the courts in making appeals difficult to succeed.

2.5.4 There is too much lawyer involvement making arbitration like litigation

Party autonomy does allow the parties to agree procedures that are neither formal nor based on court procedures. The arbitrator is under a statutory duty to implement procedures that best suits the case, he is therefore not bound to a format that follows the litigation process, nor is he bound to formality. Indeed the DAC encourage arbitrators not to "*slavishly*" follow court procedures[102] and say that the arbitrator should not be bullied by lawyers to follow court procedures[103]. In the UK, lawyers are trained to use the adversarial system and Hibberd & Newman[104] suggest that lawyers are trained to win cases, not to settle them. The AA in s.34 gives a list of procedural and evidential matters, allowing the arbitrator to determine those matters, including which rules of evidence will apply to the arbitration, whether to act inquisitorially and whether to establish the facts and the law himself. As referred to above the list in s.34 is not exhaustive and the arbitrator can put to the parties whatever he considers appropriate in the circumstances, "*untrammelled by technical or formalistic rules*"[105]. It is arguable therefore that due

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99 AA 73(1)

100 Harris, B., Plantrose, R. and Tecks,J. (2000)*The Arbitration Act 1996 a Commentary.* 2nd Ed. Oxford: Blackwell Science. p.327

101 [2000] APP.LR. 07/14 para.32. also *Benaim (UK) Ltd. V Davis Middleton & Davies Ltd.* [2003]EWCA Civ. 84; *Sinclair v Woods of Winchester Ltd* [2005]APP LR 07/14

102 DAC Para. 151

103 DAC Para. 153

104 Hibberd, P. and Newman, P. (1999) *ADR and Adjudication in Construction Disputes.,* Oxford : Blackwell Science.

105 DAC Para. 166

to these factors arbitration is not bound to a formalist, nor legalistic mode, it is in the hands of the arbitrator and the parties to ensure that this does not occur unless, in the circumstances, that is the best way forward in that particular case.

2.5.4.1 Alternative procedures available to the arbitrator

The DAC considered that the arbitrator should have the power to find the facts for himself in an inquisitorial manner, if that was to be the most appropriate way forward[106]. This removed the doubt that arbitration could be run inquisitorially as opposed to the adversarial approach in the UK courts[107]. In civil law countries an inquisitorial system is used, the judge investigating the case, assisted by the parties and then draws his conclusion. Section 34(2)(g) allows the arbitrator to act inquisitorially. In arbitration the arbitrator could conduct the case as in the civil law manner, with the arbitrator questioning the parties and their witnesses. Where an arbitrator has been appointed for his particular expertise, he may well be in a position to seek the truth himself, resulting in time and cost saving. In cases where the issues are not complex, or there is a small amount of evidence to consider, the dispute might be suitable for using a "documents only" basis, although in certain circumstances a site visit might be made if appropriate[108]. As there is no preliminary meeting, interlocutory meetings or oral hearing, the saving in time and cost could be substantial.

Many institutions have produced arbitration rules[109], some with expedited forms of arbitration. The time limits for carrying out various function varies with the different institutions, but with expedited forms the time limits are reduced considerably. For example, the Society of Construction Arbitrators has produced the 100 Day Arbitration Procedure, which as its name implies is a short procedure for dealing with construction disputes. Moreover an arbitrator can take appropriate parts of

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106 DAC Paras 171 -172

107 Harris, B., Plantrose, R. and Tecks,J. (2000) op. cit. p.178

108 The Chartered Institute of Arbitrators run a scheme on behalf of the Coal Authority. This is on a documents only basis, plus a site visit for the arbitrator to view the alleged damage.

109 Chartered Institute of Arbitrators; Institute of Civil Engineers; London Court of International Arbitration; Society of Construction Arbitrators; International Chamber of Commerce; American Arbitration Association; Bar Council etc.

different procedures to provide for a procedure that is efficient and cost effective. There are therefore many ways for the arbitrator to provide a procedure for resolving the dispute that are neither formal, nor based on court procedures.

2.6 INITIAL REACTION OF PRACTITIONERS AND ACADEMICS TO THE PASSING OF THE AA

There was much praise for the passing of the AA. It was considered as a revolution in the practice of arbitration by Merkin[110], Harris *et al*[111], Rutherford and Sims[112] and Crowter[113] who said that the AA radically changed the statutory framework of arbitration. St.John Sutton *et al*[114] refer to a coherent framework and that the AA was a welcome contribution to English law. It was considered by Cato[115] that flexibility, cost and duration were in the hands of the parties and the arbitrator and that breaking away from court procedures should bring arbitration into a very exciting era. Newman[116] referred to breathing fresh life into arbitration, whilst Bingham[117] said it was an opportunity to correct a rigid and costly process. Franklin[118] echoes similar statements to the above, but says that construction arbitration under the AA might be able to change its reputation for being expensive and protracted. Franklin goes on to say, if arbitration is to have its share of the market, it must offer more to the parties than litigation, or the other forms of dispute resolution. Similarly, Lord Ackner[119] considered that arbitration needed to be speedier and more cost effective if it was to compete with litigation. There was therefore expectation that the AA would bring about the opportunity to change the reputation of arbitration as being protracted and costly; furthermore that the

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110 Merkin, R.(2005) *Arbitration Act 1996*. 3rd. Ed., LLP. p. v London

111 Harris, B. Planterose, R and Tecks, J. op. cit. p 10

112 Rutherford, M. and Sims, J. (1996) *Arbitration Act 1996: A Practical Guide.* London: FT Law & Tax p 21

113 Crowter, H. (1998) *Introduction to Arbitration.* London: LLP

114 St. John Sutton. D., Gill, J. and Gearing, M.(2007) *Russell on Arbitration.* 23rd. Ed. London: Sweet & Maxwell : pp 1-2

115 Cato, D.M.(1997) *Arbitration Practice And Procedure Interlocutory and Hearing Problems.* 2nd. Ed. London & Hong Kong: LLP

116 Newman, P. (2001) *Alternative Dispute resolution.* Welwyn Garden: CLT Professional Publishing. p.3

117 Bingham, A. (1998) Arbitration. www,tonybingham.co.uk/arbitration.htm

118 Franklin, K. (2000) Arbitration v alternatives, *The Arbitration and Dispute Resolution Law Journal.* London: LLP Professional Publishing p 90

119 Lord Ackner (1996) forward in Rutherford, M. and Sims, J. (1996) *Arbitration Act: A Practical Guide.* London: FT Law & Tax p. xvii

restrictive provisions in AA would result in court intervention being substantially reduced. There was therefore initial expectation that the AA would bring about a remedy to long and expensive arbitration.

2.7 SUMMARY OF CHAPTER

This chapter showed briefly how arbitration developed in England, how it declined into an expensive and protracted method, allowing excessive court interference. It explained the involvement of the DAC in recommending provisions that potentially allowed former criticism of arbitration that had developed, to be dealt with under the AA. The initial reaction to the AA clearly indicated that there was hope that the efforts of the DAC and the provisions of the AA would meet this goal. This has provided a precursor to the next chapter, which investigates to what extent problems remain after the passing of the AA and what research has been carried out in respect of those problems. This leads to the development of research questions and the focus of this research.

CHAPTER 3 LITERATURE REVIEW

3.1 INTRODUCTION

The previous chapter gave a brief historical development of arbitration, showing how arbitration became more complex and subject to court intervention. It considered the reforms implemented in the AA, on the recommendations of the DAC, affecting the duties of the arbitrator and the parties, together with the reaction of practitioners and academics to the new Act. This chapter considers the problems with arbitration that remained after the passing of the AA, by having regard to comments made by practitioners and academics. This enables the main problems with construction arbitration to be identified which may be an influence on the use of arbitration. In addition, as other methods of dispute resolution have an influence on the use of arbitration, four other methods are briefly outlined. The state of research in the areas of these problems is considered. Research questions are developed and the gaps in knowledge identified.

Searches have been made in the legal data bases Lexis, Westlaw and HeinOnline, using key words, such as arbitration, construction, dispute, research. Further, every issue of Construction Law Journal and Arbitration (journal), back to 1996, have been inspected, together with several other publications. Whilst not all research theses are held by the British Library (EThOS), a search using key words construction, arbitration and disputes was made via that source. As construction law is an important element of research at London University's Queen Mary and Kings College, their publications were also considered, although their focus is on international arbitration and mediation. A thorough literature review of the material relating to the reforms of the AA and the effectiveness of these reforms has therefore been undertaken.

3.2 ARBITRATION: POST THE PASSING OF THE AA

The state of arbitration since the passing of the AA is provided by reviewing the comments by practitioners and academics published in articles together with research publications. Published articles, not involving research, express the

opinions of the people writing the article and where there has been peer review, the concurrence of the reviewer/s. With respect to research, this is usually the considerations formed by analysing the answers of many people on particular matters investigated. Whilst therefore the opinions of individuals is of importance in determining the overall state of construction arbitration, in this thesis, it is the extent of research and what it has revealed so far about construction arbitration that is of primary importance. As referred to in section 1.7, this thesis is in respect of construction arbitration in England and Wales, however some references are from research into international arbitration. It is not that there is a major difference in arbitral processes, but with international surveys, respondents come from all corners of the globe where cultural attitudes to the same issue may vary between respondents. In addition, respondents may come from different legal backgrounds. For example in a survey on international arbitration conducted by Friedland and Brekoulakis[120], 48% of respondents were from a civil law background, 44% common law background and 8% other legal backgrounds. This does not mean that all respondents were lawyers, but that there are different legal systems in different areas of the globe where respondents reside and respondents are likely to be influenced by the legal system they are familiar with.

3.2.1 Comments about arbitration contained in articles

Comments referred to generally follow a chronological order, as opposed to taking a particular feature and listing the various comments appertaining to that feature. These comments are then assembled into distinct features for further consideration. Shilston[121], before the AA was underway, said that the AA gave considerable encouragement to arbitrators, but that the traditional adversarial way had to be abandoned and replaced with trust and respect. Goode[122] opined that aggression had to change to conciliation and co-operation. He considered that better case management was needed, involvement of party executives and reducing the volume of evidence. Some four years after the AA came into force,

[120] Friedland, P. and Brekoulakis, S. (2012) 2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process. Queen Mary University London. www.arbitration.qmul.ac.uk/docs/164483.pdf Acessed21/05/2015

[121] Shilston, A. (1997) The consequences of a sea change in English arbitration procedural practices. *Arbitration* Vol.63(1)

[122] Goode, R. (1998) Dispute Resolution in the 21st Century. *Arbitration* Vol.64(1). pp 12-14

Uff refers to arbitration following court procedures and engaging in arbitration remaining costly[123]. A year later he speaks about the potential value of the AA, but contends that there are provisions within the AA that require development and that this would bring benefit to construction arbitration[124]. Parratt[125] suggested that lawyers, particularly those not fully conversant with arbitration, felt out of their depth other than with standard court proceedings and resist methods that may achieve rapid progress through innovative means. Parratt also refers to a culture of conflict with winning being more important than a fair resolution of the dispute. Whilst in an article relating to international arbitration, Hunter[126] when referring to common law lawyers, suggested that they are taught to focus on rights and not interests of their clients, with victory being the overriding factor. It is the inability of arbitrators to control the time element and that this can result in the cost of the arbitration being more than the value of the claim, which according to Clinton and Jogi[127] is putting people off of using arbitration. These early comments indicate that arbitration was conducted on adversarial lines with the aggression of common law litigation, that better case management was required to control cost, but that the AA provides potential for innovation by arbitrators and the parties to deal with these matters.

The continuing years from these early comments, the literature indicates there is little to suggest that arbitration in construction disputes has changed. Henderson and Dees[128] considered that as the AA and the HGCRA came into effect in close proximity to one another, arbitration was not given the chance to show its strengths, due to the popularity of statutory adjudication[129]. In 2004, the Society of Construction Arbitrators devised a scheme for arbitration that gives a decision within 100 days. The time period does not start until the statement of the defence, or defence to the counterclaim, should there be one, has been submitted to the

123 Uff, J. (2001) Dispute Resolution in the 21st. Century: Barrier or Bridges. *Arbitration* Vol 67 No. 1 p.11
124 Uff, J. (2002) Arbitration With The Benefit Of The Construction Act. www.scl.org.uk
125 Parratt, D.G. (2001) Is construction arbitration failing *Construction Law Journal.* Vol 17 No.3 pp209-215
126 Hunter, M. (2000) International Commercial Dispute Resolution: The Challenge of the 21st Century. Nottingham Law Journal. Vol 9 Issue 1 p.60
127 Clinton, M and Jogi, Sonal (2001) Arbitration. www.nce.uk/arbitration/814123.article
128 Henderson, N. and Dees, D. (2004) Adjudication and the Emperor's new clothes. *Construction Law.* Vol. 15 Issue 8.
129 Allen, M. (2011) Construction disputes on the rise. *Construction Law* Vol22 Issue 8

arbitrator. There is therefore some time consumed to get to the stage from which the 100 day period runs, however, this is according to Uff[130], a mechanism to bring the parties onto an even footing. That is, both the claimant and respondent (this is the term in arbitration that is equivalent to defendant in litigation), have their cases before the arbitrator before time starts running. Uff also refers to statutory adjudication being the dominant procedure for resolving construction disputes and that other forms of dispute resolution must match themselves against statutory adjudication. Gaitskell[131] considered that arbitration had been subject to the impact of statutory adjudication and mediation. Hughes and Freeman[132] acknowledged that arbitration had become unpopular, but suggested that the 100 day arbitration was worth considering as it had most of the benefits and few drawbacks. It is the erosion of speed, cost, confidentiality and the problem of joinder of several parties into one proceeding that according to Bell[133] has resulted in the construction industry moving away from arbitration. Bell also refers to domestic arbitration adopting traditional litigation procedures. Whilst referring to international arbitration, it is the opinion of Onyema[134] that the quality of arbitral proceedings is largely dependent on the quality and skill of the arbitrator.

Newman commented on the decline of arbitration in the construction industry[135]. The comment referred to the JCT 2005 suite of contracts which are standard forms of contracts for use by the construction industry. In this version of their standard contracts, where the parties had failed to specify how their disputes would be resolved, there was a presumption in favour of litigation rather than arbitration. This has continued in the JCT 2011 suite, for example in the Design and Build contract it requires that if it is intended to use arbitration, it must be specifically stated. Newman suggested that this reflected a semi-official

130 Uff, J. (2005) 100-day arbitration: is the construction industry ready for it. *Construction Law Journal* Vol.21 Issue 1 pp 3-10

131 Gaitskell, R. (2007) International statutory adjudication: its development and impact. *Construction Management and Economics.* Vol.25 Issue7 pp. 777-784.

132 Hughes, J. and Freeman, K (2005) Around the world in 100 days. *Construction Law.* Vol.16 Issue 3

133 Bell, G.(2006) Construction arbitration- past and present. *Construction Law.* Vol. 17 Issue 6 pp 17-19

134 Onyema, E. (2005) Selection of arbitrators in international commercial arbitration. *International Arbitration Law Review* Vol. 8 Issue 2 pp 45-54

135 Newman, P. (2008) A fillip for arbitration. *Construction Law.* Vol.29, Issue 1. P26

recognition that arbitration was in decline in the construction industry. Newman[136] also suggested that, particularly where counsel is involved, arbitrators' directions tended to replicate those of litigation. Ennis[137] considered that the rise in adjudication mirrored the decline in arbitration. Ennis also went onto say that the arbitral process had moved towards a litigation style process due to its familiarity with lawyers. Cidoli del Ceno[138] in an article about mediation, referred to arbitration being increasingly confrontational and similar to litigation with its associated costs. It was thought by Harris *et al* when they wrote the 3rd. edition of their book in 2003 that arbitrators were responding to the philosophy of the AA, however by the time of their 4th. Edition in 2007, they considered there had not been any further progress in that regard. They commented that "*There are no great recent signs in the adoption of imaginative time and cost saving procedures that might have been hoped for."* In an article from Pinsent Masons (a firm of solicitors)[139], they commented that construction arbitration is not what it set out to be, it often adopts a litigation approach, with detailed pleadings, wholesale disclosure, long and detailed witness statements and lengthy expert reports. They questioned whether construction arbitrations will survive if they continue in this mode.

In an effort to reduce cost and duration, Limbury[140] refers to a hybrid solution using mediation with arbitration using the same third party neutral for both parts of the process. He says that starting with mediation, if this fails to produce a resolution to the dispute, it can pass onto arbitration and the arbitrator will be "*up to speed*" due to information gleaned from the mediation part of the process. If the dispute is settled during the mediation, a contractual facility can be entered into to enforce the agreement. If the settlement is by arbitration, then it will be dealt with by way of an award. There is some concern, that from an international aspect, it may be

136 Newman, P (2009) Commercial arbitration *Construction Newsletter* 2009 Jan/Feb 4-5

137 Ennis, C. (2012) Arbitration of disputes in UK construction projects: what is left after adjudication? *Construction Law Journal* Vol. 28 Issue 8 pp585-589

138 Cidoi del Ceno, J. (2013) A Process Account of Construction Mediation. *International Review of Law.* Vol 2013, Issue 1 p 22

139 Pinsent Masons (2006) Construction Arbitration – Past and Present. http://www.pinsentmasons.com/media/13167961.htm. accessed 16/02/11

140 Limbury, A. (2012) Med/Arb getting the best of both worlds. *Law Society Journal* Vol.48 Issue 8 pp 62-65

difficult to enforce a mediation agreement, Wolski[141] however suggests arbitration followed by mediation and back to arbitration. With this the arbitration is commenced, giving parties the opportunity of agreeing a consent award, or going the full arbitration process. If it moves on to mediation, but fails to reach an agreement, it can go back to arbitration, or if an agreement is reached in the mediation, that agreement can go into a consent award, having the benefit that goes with enforcing arbitral awards. Mau[142] investigated arbitration –mediation – arbitration using a convenience sample of arbitrators, mediators, advisers to disputants and parties involved in disputes. The survey used questionnaires with a five point Likert scale being used and receiving 180 responses. As Mau considered that there was a possible lacuna in the acceptability of this process in ADR, he conducted a small pilot study, which revealed that the majority of the respondents would not recommend the arbitration-mediation-arbitration procedure.
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There are therefore many comments outlining apparent failings with arbitration that remain after the passing of the AA. There are many more references that could be included in the above, however they would only bulk out what has already been identified, rather than highlight additional problems of major consequence with arbitration. In addition, there are several PhD theses, which at first glance appear to be relevant, however they are not sufficiently connected to the subject matter of this study to provide any useful insight of a meaningful nature[143].

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141 Wolski, B. (2013) Arb-Med-Arb (and MSA's) A whole Which is Less than, Not Greater than, the Sum of its Parts. *Contemporary Asia Arbitration Journal* Vol. 6 Issue2 pp 249-274

142 Mau, S.D. (2015) Arbitration to mediation to arbitration with the same parties in the same international commercial dispute before the same neutral: innovative evolution or recipe for disaster. *Construction Law Journal* Vol. 31 Issue 8 pp-429-463

143 Seriki,H.O. (2002) *Judicial involvement & intervention in arbitration proceedings after the Arbitration Act 1996.* PhD Thesis. Cardiff University; Pontin, N. M.-P. (1998) *A comparative study of the context of arbitration and the powers and duties of arbitrators in the light of English, French, Scottish law and the ICC Rules*. Ph.D. Thesis, University of Edinburgh; Brekoulakis, S.L. (2008) *Arbitration And Third Parties* PhD Thesis. Queen Mary University London.; Ren, Z. (2002) *A Multi-Agent Systems Approach To Construction Claims Negotiation.* PhD Thesis, Loughborough University; Sinclair, S. (2016) *Designing+(dis)assembling disputes: an ethnography of disputes& lawyers in the construction industry.* PhD Thesis University of Westminster; Younis, G.E. (2010) *Minimising Construction Disputes.* PhD Thesis, University of Salford

3.2.3 Continuing problems likely to affect the use of arbitration

Despite the intention of the AA to resolve the problems with arbitration referred to in section 2.3, problems still remain as previously described. Furthermore, there is real evidence of other methods of dispute resolution competing with arbitration in respect of resolving construction disputes. The general indications from these comments are:-

1. arbitration remains unpopular and in decline.
2. that duration and cost of arbitration remains a problem.
3. arbitral procedures continue to follow those of litigation.
4. arbitration has strong competition from other dispute resolution processes.

There are two concerns prior to the AA that do not, generally, reflect in the concerns raised by academics and practitioners post the passing of the AA. Prior to the AA, firstly there was concern about court intervention and secondly there was the concern regarding the complexity of the law governing arbitration. These two prior concerns do not now appear to be major concerns affecting the use of construction arbitration. These two issues aside, it appears that items two to four are the main drivers of the unpopularity of arbitration and its possible decline. As items one to four are derived from academic and practitioners comments, the next step is to determine what research has been undertaken in respect of these items.

3.3 INTERNATIONAL ARBITRATION RESEARCH POST THE AA

As referred to in section 3.1, research has been undertaken involving arbitration either as the main area of study, or as a subsidiary part of the study. In section 3.2, reference is made to arbitration research, which has been carried out using international data. For the reasons already explained, there is a difference between domestic and international arbitration. For example with international disputes, construction arbitration is a popular method of resolution[144], whereas with

[144] Gerbay, R., Mistelis, L. and Schmitthoff, C. (2013) Corporate choices in International Arbitration Industry perspectives . www.arbitration.qmul.ac.uk./docs/123282.pdf p.8 accessed July 2014

domestic construction disputes, arbitration is not a popular method, as revealed immediately above. Whilst it could not be construed that comments and opinions from international surveys are reflective of construction arbitration in England and Wales, it is arguable that some of the comments and opinions expressed internationally might be helpful in understanding domestic construction arbitration. It is also necessary to be aware that most of the international surveys are for arbitration as a whole and not solely construction. The intention of considering these international surveys is not to investigate gaps in knowledge in international arbitration, but to determine if there are any factors reflected in international arbitration that might be considered as helpful to domestic arbitration in the construction industry.

3.3.1 International surveys: Queen Mary University of London

Queen Mary University of London have conducted a number of surveys in international arbitration, the latest being in 2012[145], 2013[146] and 2015[147]. All of these surveys used a similar methodology with questionnaires and follow up interviews. The samples, although not all of the same source, were global. Only the 2013 survey has a split for construction, the others are arbitration generally. The 2012 survey, amongst other matters, contained opinions on what factors might speed up arbitration. Only the first three items are shown below, as with the remainder there is little difference between the effective and least effective percentages. The factors are:- identifying issues early (64%, 23%, 13%); appointment of sole arbitrator (international tribunals usually comprise three arbitrators) (57%, 25%, 18%) and limiting or excluding documents (46%, 28%, 26%). Percentages shown behind each item represent the following:- the first percentage is the proportion of respondents that considered it most, or quite, effective; the second percentage represents the proportion of respondents that considered it least, or less, effective; with the third percentage being referred to as never having been done. With

[145] Zrilic, J. and Brekoulakis, S 2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process. www.arbitration.qmul.ac.uk.?research/2012/index.html accessed 19th Dec. 2012

[146] Gerbay, R., Mistelis, L. and Schmitthoff, C. (2013) Op. cit.

[147] Metsch, R., Mistelis, L. and Schmitthoff, C. (2015) 2015 International Arbitration Survey: Improvements and Innovations in International Arbitration. www.arbitration.qmul.ac.uk/research/2015 accessed 5th Sept. 2016

respect to providing documents, 70% of respondents considered that these should be limited to those that are relevant to the case and material to the outcome. Respondents were asked if they thought that the length of written submissions should be limited, with 45% answering yes and 47% with no, therefore there is little difference in the two opinions.

The 2013 survey investigated arbitration relating to financial services, energy and construction, with the respondents being in-house counsel (lawyers employed by corporations). The survey investigated the popularity of arbitration, which again was by far the most popular, including construction. It was reported that many respondents and interviewees were concerned about the cost and delays in arbitration, when asked to rank 8 "perceived benefits of arbitration in respect of their importance", cost and speed were ranked 8th and 7th respectively by respondents[148]. There was also concern that arbitration was becoming subject to "judicialisation" with control over the process moving towards law firms.

The 2015 survey included a question asking what respondents considered the most valuable characteristic of arbitration. Enforcement of awards and avoiding National courts were the two most favourable by far. This is understandable with international arbitration, as it can be difficult to get foreign courts to enforce an award, however with arbitration, awards can be enforced through the New York Convention[149]. Further, a party trying to deal with matters that may come before a foreign court may well feel at a disadvantage if the other party is of the nationality in which the court is situated. Cost and speed were the least valuable characteristics. In another question cost was considered, by far, the worst characteristic of arbitration, whilst speed was the fourth worst feature. Respondents were asked what improvements could be made with arbitration; many respondents considered there was a need for procedural innovations to

[148] These results were in respect to arbitration generally and not just construction.

[149] Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention), New York, 10 June 1958. There are 156 (May 2015) member States, who have agreed that they will enforce foreign arbitration awards.

control duration and cost, that arbitration should remain a one stop shop. An issue that came up repeatedly was the reluctance of tribunals to act decisively in certain situations for fear of being appealed, referred to as “due process paranoia”. This phrase also applied to deadlines repeatedly being extended, fresh evidence being produced late and other disruptive behaviour by counsel. It was expressed by some interviewees that this was a cause of delay and cost problems. Respondents were overwhelmingly supportive of the use of simplified procedures for smaller claims. With regard to what counsel could do better, respondents suggested that opposing counsel should work towards narrowing the issues, limit documents, encourage settlement, including mediation and not overlawyering.

There are some useful suggestions from the international scene and whilst this does not mean that all apply to domestic construction arbitration matters that relate to duration and cost of arbitration need to be considered.

3.3.2 International survey: Ministry of Justice

Research was carried out on behalf of the Ministry of Justice, also being on an international basis[150]. It was research investigating international litigants and the London courts, however there were some references to arbitration, again on a global basis and related to arbitration generally. The methodology was questionnaires and follow up interviews. Factors given as favourable to arbitration were less extensive disclosure (documents), informality and flexibility, confidentiality, better control over the process, ability to choose arbitrator, finality of award and that arbitration was mobile. These comments are in essence the perceived advantage of international arbitration over litigation. Reference was made by some respondents that there was some disillusionment with arbitration due to quality and cost of arbitration and its duration due to unavailability of arbitrators.

[150] Lein, E., McCorquodale, R., McNamara, L.,Kupelyants, H. and del Rio, J. (2015) Factors Influencing International Litigants’ Decisions to Bring Commercial Claims to the London Based Courts. Ministry of Justice. www.gov.uk/government/uploads/system/uploads/attachment data/file/396343/factors-influencing-international-litigants-with-commercial-claims accessed 19th Aug.2016

3.4 THE CURRENT STATE OF RESEARCH OF FACTORS INFLUENCING THE CHOICE OF ARBITRATION

The AA brought about a major reform of arbitration law and procedure and was not simply a consolidation of previous matters[151]. There were therefore many changes and Harris *et al*[152] listed 17 major changes to the law of arbitration, each potentially having significant effect. As noted in section 3.2.3, the comments from academics and practitioners indicated three major factors (factors two to four) of concern about arbitration that were perceived to remain post the passing of the AA and influence, or contribute, to popularity issues and decline. Further, the HGCRA with statutory adjudication, the major reforms to court procedures and the increased use of mediation in construction disputes, came after the passing of the AA. There has therefore, been a considerable sea change in construction dispute resolution from what it was prior to the passing of the AA to that after the passing of the AA. It is therefore the research that has been undertaken since, or around, the passing of the AA that is considered below.

3.4.1 Decline in the use of arbitration

In 2014 Reynolds[153] researched into the state of arbitration in England. Whilst the study was about arbitration generally, there were comments on construction arbitration. Reynolds refers to the study as having a phenomenological approach, with data from institutions, questionnaires (11 returned) and interviews with arbitrators. The institutions providing detail of the number of appointments were the CIArb, ARIBA, ICE and the RICS. With respect to the CIArb, the number of appointments was for arbitration and adjudication together, with no apportionment between the two, hence the number of arbitrations was not known. More specifically, neither is there a split to allow any assessment of the number of construction arbitrations, although Reynolds suggests, from interview data, that

[151] Hughes, A. and Billing, B. (2001) The Arbitration Act Five Years On. *New Law Journal* Vol.151, Issue 7002. p. 1432

[152] Harris, B., Planterose, R. and Tecks op.cit. p.19

[153] Reynolds, M. (2014) An overview of the use of arbitration in England. Centre for Socio-Legal Studies; Oxford University

construction arbitrators only have one or two arbitrations per year. With respect to the number of appointments made by the RICS, although the number of appointments was split into categories, none referred specifically to construction arbitration. This again leaves the number of construction arbitrations unanswered. Further, Reynolds says that arbitrators receive more private appointments than from institutions. There is therefore considerable doubt as to what the number of arbitrations really is and Reynolds says that his analysis of this is only indicative. Reynolds considered that there had been a decline in the use of arbitration, but that the decline had "bottomed out", although there is little empirical data presented to support this statement beyond that provided by the CIArb and this was arbitration generally and not solely construction arbitration. Black and Fenn[154] obtained data from institutions regarding the number of arbitration appointments. Whilst there was a suggestion of declining numbers, they reported that due to incomplete records or inadequate detail, analysis was not possible. There is therefore a considerable gap in empirical knowledge relating to the use of arbitration and decline, or otherwise, in construction arbitration.

A survey carried out by Burns[155] on behalf of the RICS, considers that arbitration, although unpopular from the 1980's, is now "*on the way up*". He says that construction and engineering disputes are highly technical and arbitration needs high quality arbitrators who should come from technically qualified people who understand, due to their experience, the nature of construction disputes. The survey used questionnaires sent to lawyers and claims consultants, with 14 responses received. The main thrust of the survey was to determine how the RICS might improve their dispute resolution service in the construction sector. The questions were open ended; hence respondents could express their opinion. Most respondents considered that arbitration would be better for complex technical and final account disputes, rather than using adjudication or litigation. Similar to Reynolds, there is no empirical data in respect of construction arbitration to assess

[154] Black, M. and Fenn, P. (1999) Survey of construction arbitration in the United Kingdom. *Arbitration* Vol.65 Issue 3 pp 217-226

[155] Burns, M. (2015) Building Bridges Professional Arbitration. New Law Journal 165 NLJ 7676 p.20. Martin Burns is head of the RICS dispute resolution service.

decline or increase in the use of arbitration in the construction industry. The research by Burns therefore does not fill the gaps that remained after Reynolds's research.

As Reynolds points out, institutional data can be difficult to analyse in respect of extracting how many arbitrations have been conducted. From the above two paragraphs, it is clear that the question of decline, or otherwise, of construction arbitration has not been fully answered. Whilst the data from institutions obtained by Reynolds gave information that would allow trends to be analysed, there was no way of determining the trend of construction arbitration. This is therefore another gap that requires to be filled.

Reynolds refers to time, cost, litigation style procedures, quality and skill as being factors that have contributed to decline in arbitration. Brooker showed that duration, cost and the adversarial approach affected the choice of arbitration in a negative way[156]. Whilst Reynolds and Brooker refer to several features of arbitration that affect, in a negative way, choosing arbitration, there are many other features of arbitration that can have a negative effect on parties choosing arbitration. In the converse there will be features that have a positive effect on choice. There appears therefore, from the literature, to be a gap in knowledge of negative and positive effects of features of arbitration on parties and their advisers when considering choosing arbitration to settle their construction disputes.

3.4.2 Duration and cost of arbitration

Brooker[157] researched into the factors that influenced the development and choice of alternative dispute resolution in the construction industry. Whilst the research was an investigation into alternative dispute resolution (ADR), defined by Brooker as any system other than arbitration or litigation; it did include questions relating to

[156] Brooker, P. (1997) *Factors which impact on the choice of alternative dispute resolution in the construction industry.* Ph.D. Thesis, Oxford Brooks University. p. 132-142

[157] Brooker, P. (1997) idem

arbitration. Those questions concerned the cost of arbitration and whether arbitration was a satisfactory procedure for settling construction disputes. The results showed that a high percentage of respondents considered that the cost of arbitration was high, but there was nothing conclusive either way regarding the respondents' view as to the question of the suitability of arbitration as a method of solving disputes in the construction industry[158]. The methodology used a quantitative method by way of a survey; collecting data using questionnaires and a qualitative approach using interviews. The participants supplying data in Brooker's research were from main contractors and sub-contractors/specialist contractors. As the data collected by Brooker is likely to have taken place 1996/7 and as the AA only came into force on 31st January 1997 there would have been little experience of its effect. Further, statutory adjudication under the HGCRA did not come into force until 1998 and therefore is not dealt with by Brooker. Whilst Brooker's research clearly demonstrates that main and sub-contractors consider arbitration to be costly, their responses involving arbitration will largely be based on pre-AA experiences.

Beynon[159] researched into the dispute resolution methods of arbitration under the AA and adjudication under the HGCRA, as used in the construction industry and whether they complied with access to justice. The reference of access to justice being based on eight criteria given by Lord Woolf (1995) in his interim report and being part of the process of the proposed reforms of court procedure. The methodology was a quantitative approach, with a survey using separate questionnaires to arbitrators and adjudicators and sent electronically. The questions mainly related to the process of the systems and the results analysed to determine whether or not there was compliance with Lord Woolf's criteria. There were however questions relating to some aspects of cost and duration involved in arbitration and adjudication. With respect to arbitration the study suggested that arbitration is not a cost effective mechanism and is slow. The main difference in

158 Brooker, P. (1997) idem., pp. 143-144

159 Beynon, K.S. (2005) *Dispute Resolution and Access to Justice with Particular reference to the Construction Industry in the United Kingdom.* PhD Thesis. University of Wales, Swansea.

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respect of the cost of arbitration between Beynon's research and that of Brooker, is Brooker's sample was from industry (main and sub-contractors) and Beynon's was from arbitrators. Both showed a decisive opinion that arbitration was considered by respondents to be costly.

Regarding duration and cost of arbitration, Reynolds's data is mainly from interviews with arbitrators, although there is some very limited detail from the questionnaires. Comments from some practitioners (interviewees) suggest that it is the duration and cost element that has led to the decline in arbitration. Reynolds also refers to interviewees considering that legal fees have burdened arbitration. With regard to the questionnaires, the detail provided by Reynolds only involves six respondents who indicate that their arbitrations took between 3 months and two years. There is therefore, limited empirical data regarding duration and cost.

There are many factors of arbitration that can be considered as affecting duration and cost. For example, limiting recoverable costs; early submission of detailed claim; use of expedited methods and the like all affect duration and cost. To keep control of the arbitral process and in particular duration and cost, the process must be conducted in an effective and efficient manner. There does not appear, from the literature, that there is any empirical research investigating opinions regarding the importance of features for effectively conducting the arbitral process.

3.4.3 Arbitral procedures following those of litigation.

Black and Fenn[160] researched into construction arbitration in the UK in 1997. The sample was obtained from appointing bodies and involved only arbitrators, providing both quantitative and qualitative data. Black and Fenn referred to construction arbitration mimicking litigation. They also asked respondents if they adopted court style proceedings, with 67% of those answering the question stating that they did. Respondents were asked if they favoured fast track procedures and

[160] Black, M. and Fenn, P. (1999) Survey of construction arbitration in the United Kingdom. *Arbitration* Vol.65 Issue 3 pp 217-226.

89% said that they did, with 71% stating that they had adopted fast track procedures. This is somewhat of an anomaly as fast track procedures would be considered as a departure from court style procedures.

Reynolds concludes that arbitration has been negatively affected by the litigation like tendencies of its procedures. He also refers to criticism by respondents of lawyers' approach to arbitration. These are derived from interview data as opposed to empirical data. Beynon also described arbitration as being adversarial and legalistic and being corrupted to ape litigation. These conclusions were based on empirical data, although there were only three choices in the question asking for a description of the arbitration process, these being "legalistic and formalistic", "adversarial" and "inquisitive"[161]. There was therefore no positive description available for the respondents to make positive comments, should they have wished to do so. Brooker produced two papers using the data from the PhD[162]. Both have a main theme of ADR. One of the papers deals with the juridification of ADR, but also includes arbitration. The concept of juridification is drawn from interview data, in which respondents blame lawyers for the large amount of discovery requested. Respondents also considered that the adversarial system mainly benefited the legal profession and that the arbitration system has been taken over by lawyers. As referred to in section 3.3.1, the 2015 Queen Mary survey indicated that respondents considered, using their phrase, overlawyering a problem in international arbitration. Quite clearly this also appears to be the case in domestic arbitration.

Black and Fenn, Brooker, Beynon and Reynolds, all showed that arbitration had a tendency to follow court style proceedings. Brooker and Reynolds obtained this result by way of interviews, with Brooker using main and sub-contractors and Reynolds using arbitrators. Beynon used arbitrators' perceptions from

[161] Beynon, K.S. (2005) idem p. 145

[162] Brooker, P. and Lavers, A. (1997) Perceptions of alternative dispute resolution and constraints upon its use in the UK construction industry. *Construction Management and Economics* Vol15 Issue 6 pp 519-526. Brooker, P. (2000) The "Juridification" of Alternative Dispute Resolution. *Anglo-American Law Review. Vol 28 Issue 1 pp. 1-36*

questionnaires. There does not appear to be any quantitative research, other than that of Beynon and as already pointed out, the answers available to respondents in that research was too limited. Empirical data relating to arbitration following court style proceedings is thus limited and therefore there is a gap to be filled in this respect.

3.4.4 Competing dispute resolution methods

There are numerous other methods of dealing with construction disputes[163] and these may have had an impact on the apparent reduction of construction arbitrations. The impact of all possible alternatives will not be investigated, only those that are considered the main alternatives. The following were chosen, as they appear to be the most widely used methods in the construction industry[164]. These are litigation, statutory adjudication under the Housing Grants, Construction and Regeneration Act 1996(HGCRA) as amended, mediation and expert determination. There is considerable literature appertaining to these alternative dispute resolution methods; however it is only intended to, briefly, show that they have grown in popularity or, as in the case of the courts, reformed to reduce duration and cost, thereby potentially resulting in reducing the use of arbitration in the construction industry.

3.4.4.1 *Litigation*

Litigation in the United Kingdom is based on the Common Law system. Where two or more parties have a dispute that cannot be resolved between themselves by negotiation, they may apply to the courts for a determination of the dispute. It does not require the parties to agree to litigate and a disgruntled party can start a civil action unilaterally. In civil cases generally, the opposing parties argue their

[163] Litigation; mediation; statutory adjudication; mini trials; review boards and many other : see Fenn, P., O'Shea, M. and Davies, E. (1998) *Dispute Resolution and Conflict Management in Construction an International Review*

[164] Reynolds, M. (2014) op.cit. refers to four key dispute processes, being litigation, arbitration, statutory adjudication and mediation. The survey on International Arbitration by Gerbay, R., Mistelis, L. and Schmitthoff, C. (2013) Op. cit. referred to dispute resolution methods of arbitration, litigation, adjudication/expert determination and mediation.

respective cases, known as an adversarial approach, before a judge, who considers the facts that are presented and applies the relevant law to determine the case. It is therefore for the parties, usually through a solicitor or barrister, to prove their case. The system includes cross-examination of one party's witnesses by the other party's lawyer, which can be quite traumatic. It is recognised that the court system is expensive and time consuming and both Lord Woolf and Lord Justice Jackson, in their separate reports[165], dealt with reforms affecting justice and cost of litigation. Further, the Civil Procedure Rules (CPR), governing court procedures, encourages the use of alternate dispute resolution methods[166], prior to litigation, in order to avoid going to trial with its inherent cost. The alternative method is considered to be mediation, which is referred to below in section 3.4.4.3. The Technology & Construction Court (TCC) has specialist judges with knowledge of construction, which has also enhanced the quality of litigation in the construction area. According to Reynolds[167], parties tend to prefer litigation rather than use arbitration, due to the quality of judges in the TCC. Gould *et al* also praise the TCC[168], they go on to say that the procedural interventionist powers now provided under the CPR enable judges to manage the case, even if at odds with what the parties might have chosen. This is opposite to arbitration where the parties have the last say due to party autonomy. Arbitrators have to abide by agreements between the parties, even if they fly against controlling duration and cost, or applying the best procedure for the particular dispute, a judge is not so bound. Further, the CPR[169] provides for pre-action protocol for construction and engineering disputes. According to research by the Technology and Construction Solicitors Association (TeCSA)[170], respondents considered that the pre-action protocol enables parties, amongst other things, to consider the dispute, narrow the issues in dispute and save costs. These reforms may have made litigation a more

165 Lord Woolf MR, 'Access to Justice Final Report' July 1996. Jackson LJ, 'Review of Civil Litigation Costs: Final Report, December 2009'.

166 CPR Part 1 1.4 (2)(e)

167 Reynolds, M. (2014) op cit p. 30

168 Gould, N., King, C. And Britton, P. (2010) Mediating Construction Contracts: An evaluation of existing practice. Kings College, University of London. p.3

169 Civil Procedure Rules. Pre-Action Protocol for Construction and Engineering Disputes. www.justice.gov.uk/courts/procedure-rules/civil/protocol/prot_ced Accessed 27/09/16

170 Technology and Construction Solicitors Association. (2016) A Report Evaluating the Perceived Value Of The Construction and Engineering Pre-Action Protocol http://www.tecsa.org.uk/sites/default/files/TeCSA%20PAP%20Research%20Project%20-%20Final%20Report%20160113.pdf accessed 27/09/16

attractive method of dispute resolution than arbitration and this research investigates this possibility. The court system is however, subject to the CPR and parties and judges are bound by these rules in the manner in which the procedures are conducted. The process is not private and therefore in the public domain, which is likely to be considered a disadvantage of litigation by many parties.

3.4.4.2 *Statutory adjudication*

The HGCRA came into force on the 1st May 1998 and Part II of this Act applies to England, Wales and Scotland[171]. Separate provision was made for Northern Ireland in The Construction Contracts (Northern Ireland) Order 1997[172], which also included for the Scheme for Construction Contracts in Northern Ireland[173]. The HGCRA was amended by The Local Democracy, Economic Development and Construction Act 2009(LDEDCA). The intention of statutory adjudication under the HGCRA was to have a speedy and cheap determination of disputes arising during the progress of the works[174], such that there was less delay to the completion of the works. This was to give a binding but temporary resolution, but should a party disagree with the decision of the adjudicator they can challenge that decision in the courts or through arbitration, if the parties agree to the latter. When adjudication was being discussed prior to the HGCRA coming onto the statute book, Simmonds[175] observes that it was thought that statutory adjudication would deal with relatively uncomplicated issues. The HGCRA allows a party to start adjudication "at any time"[176], it is not a consensual process and can be done unilaterally, that is the agreement of the other party is not required to start the adjudication. Hence the use of adjudication has increased to include virtually all types of construction disputes, whether during or after completion of works and whether complex or large, a "one size fits all" situation[177]. The adjudicator has 28

171 The whole extent of the HGCRA applies to England and Wales, however s.148(2) makes Part II also applicable to Scotland.
172 Statutory Instrument 1997 No.274(N.I. 1)
173 Art.13
174 *Macob Civil Engineering Ltd. v Morrison Construction Ltd.*[1999] All E.R. 143. para 14
175 Simmonds, D.(2003) *Statutory Adjudication.* Blackwell Publishing : Oxford p.xiii;
176 HGCRA s.108(2)(a)
177 Atherton, M. (2010) Adjudication at the crossroads: the Construction Act -one size fits all?

days from receiving the referral to giving a decision[178], although there is provision for an extension of time by 14 days[179]. Milligan and Cattanach[180] indicated that 80% of adjudications are completed within 42 days. It is recognised by the courts that the timescale for reaching decisions is tight and can lead to errors in fact and law, but if the adjudicator has answered the question asked, although wrongly, that decision is likely to be upheld by the courts[181]. Further adjudication may not necessarily be cheap[182]. It is a private process and only comes to the courts attention, which is not private, when there is a legal challenge.

The HGCRA, bringing in statutory adjudication, is believed to have made a huge impact on construction arbitration. There has to be a construction contract between the parties, but the original requirement to have the contract in writing as been amended and now includes verbal[183] contracts. Reynolds considered that adjudication remains the most popular method for resolving disputes in the construction industry as it provides a quick resolution to the dispute, which is what the industry requires[184], although there is little empirical data underpinning this claim. Data collected from adjudication appointing bodies by Trushell *et al* at Glasgow Caledonian University shows that statutory adjudication under the HGCRA increased substantially and almost certainly affected the use of construction arbitration[185]. In 1998/9 the number of adjudications was reported as

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Construction Law Journal. Vol. 26, No. 3 : Thomas Reuters (Legal) Limited. Pp 228-232

178 HGCRA s.108(2)(c). This sub-section also allows the parties to agree any length of time in which the decision is to be given, subject to this agreement being after referral.

179 HGCRA s.108(2)(d)

180 Milligan,L.J., and Cattanach, L.H. (2014) Report No 13 October 2014. Construction Dispute Resolution: Glasgow Business Park, Glasgow

181 *Macob Civil Engineering Ltd. v Morrison Construction Ltd.*[1999]All E.R. 143. *Carillion Construction Ltd. v Devonport Royal Dockyard Ltd*[2005]EWHC Civ. 1358 paras. 85-87

182 In *CIB Properties Ltd. v Birse Construction Ltd* [2004] EWHC 2365 (TCC) the adjudicator was granted approximately three months from appointment to giving his decision. An interesting aspect of this case was, it was said, that the joint costs to the parties amounted to £2,135,074 and the adjudicators fees were £150,000.

183 The Local Democracy, Economic Development and Construction Act 2009 Part 8 s.138 repealed s. 107 of the Housing Grants. Construction and Regeneration Act 1996, which required construction contracts to be in writing.

184 Reynolds, M. (2014) op cit p.30

185 Trushell, I.,Milligan, J.L. and Cattenach, L.H. (2012) Glasgow Caledonian University adjudication reporting centre. http://gcu.ac.uk/media/gcalwebv2/ebe/content/Adjudication%20report%2012%20-%20October%202012.pdf Accessed 15/11/15. Also see Milligan,J.L. and Cattenach,L.H. (2014) Construction Dispute Resolution: Report No. 13 http://www.cdr.uk.com/documents/Report13_001.pdf Accessed 15/11/15

187, increasing to 2027 by 2001/2 and although the numbers, per year, fluctuated thereafter, the number in 2011/12 was 1093. Milligan and Cattanach[186] working as a private company continued to collect data on adjudication appointments, with the number of referrals in the year 2013/14 being 1282. These figures do not include private appointments. Kennedy *et al*[187] referred to adjudication as being successful and Agapiou[188] concurred, but also referred to adjudication providing a sustainable source of revenue for both adjudicators and lawyers, such that they had an interest in using adjudication. As previously stated citing Uff, adjudication has become the dominant method for resolving construction disputes. Further, Allen[189] when reporting research carried out by E.C. Harris regarding construction disputes globally, referred to adjudication featuring highly as a dispute resolution method in the UK. Despite some reduction in the number of statutory adjudications reported and having regard to the private appointments, statutory adjudication must have affected the use of arbitration.

3.4.4.3 *Mediation*

This is also a private process where a third part intermediary, the mediator, attempts to assist the disputing parties towards a settlement of the dispute. It is a consensual process requiring both parties to agree to use mediation. With facilitative mediation the mediator does not determine the outcome and if agreement is reached, it is the parties who determine the terms of the agreement. Evaluative mediation and conciliation are similar in that the mediator will offer advice and possible solutions. Having determined, from the parties, what the dispute is about and what remedies the parties are seeking in order to resolve the issues disputed, the mediator will move between the parties to try to narrow the issues between the different views and towards a settlement. The mediator will usually see one party alone and discuss the issues and the remedies they seek,

[186] Milligan, J.L. and Cattenach, L.H. (2014) Ob. cit. p.4

[187] Kennedy, P., Milligan, J., Cattanach, L. and McCluskey, L. (2010) The development of statutory adjudication in the UK and its relationship with construction workload. Proceedings of the 2010 COBRA Conference, Paris, France.

[188] Agapiou, A. (2013) UK construction participants' experience of adjudication. *Management, Procurement and Law.* Vol.166, Issue MP3. pp. 137-144.

[189] Allen, M. (2011) Construction disputes on the rise. *Construction Law Journal.* Vol 27 Issue 6 pp 525-528

then move to the other party, again alone, and discuss the issues and their remedies. He will move between the parties, back and forth, pointing out various matters, but not instructing nor advising if using facilitative mediation, but attempting to get each party to understand the other party's point of view, resulting in each party giving ground and ultimately a resolution of the conflict. Mediation is not binding, however if an agreement can be reached, the terms of the agreement can be made into a contract between the parties. If agreement cannot be reached, then the mediation will close and the parties take some other course of action. If parties initially proceed with litigation, they will be expected to take steps to try to resolve their dispute before proceeding to trial[190] and although it does not have to be by mediation, it is usually the course taken as referred to in section 3.4.4.1. Gould *et al*[191] suggests that court imposed mediation is not as popular as traditional mediation. The Centre for Effective Dispute Resolution (CEDR) considered that their mediation audit of 2014[192] indicated that mediation had increased by 9% annually since 2012. The latest CEDR audit of 2016 indicated a growth since 2014 of 5.2%[193]. Whilst this was with regard to civil and commercial mediation and not specifically construction mediation, civil and commercial mediation has grown, albeit a small slow down in the last two years. In a survey by Gould *et al*[194] respondents considered that there could be savings of up to £300,000 against the action going to judgement. This is a considerable sum, but almost certainly will be in respect of large and complex cases. As arbitration is considered to be litigation in the private sector[195], then mediation might well be considered to be considerably cheaper than arbitration and therefore adding to the pressure on arbitration to have regard to costs. It was the opinion of some of the respondents in Abdullah's research[196] that mediation allowed the parties to have control, thereby providing a powerful way of dispute resolution. Brooker's

190 CPR Rule 26.4

191 Gould, N., King, C., Hudson-Tyreman, A., Betancourt, J.C., Ceron, P., Lugar, C., Luton, J., Moeckesch, A.K. and Li, Y. (2009) op.cit. p.30

192 Centre for Effective Dispute Resolution. The Sixth Mediation Audit (2014). www.cedr.com/docslib/The Mediation Audit 2014.pdf Accessed 10/09/2015

193 Centre for Effective Dispute Resolution. The Seventh Mediation Audit (2016). www.cedr.com/docslib/The Seventh Mediation_ Audit 2016.pdf Accessed 15/12/2016

194 Gould, N., King, C. And Britton, P. (2010) Mediating Construction Disputes: *An Evaluation of Existing Practice*. Kings College, London University p 53

195 Sir John Donaldson MR in *Northern Regional Health Authority v Derek Crouch Construction Company* Ltd[1994] 1 QB 644

196 Abdullah, M.A.H. (2015) An Investigation of the Development of Mediation in the UK Construction Industry, PhD Thesis University of Manchester

research[197] also suggests lawyers are engaging in construction mediation as they are not only proposing mediation, but also using it.

With mediation therefore, the parties are in control of the outcome, although for it to succeed one, or both parties, have to give way on part of their claim, no matter how strong that part of their claim might be. None the less, the above is an indication of the growth of mediation, which is competing against other forms of dispute resolution, including arbitration.

3.4.4.4 *Expert determination*

Expert determination is also a private process, which is consensual, requiring both parties to agree to the process. The dispute is referred to a third party expert who determines the outcome of the dispute. The process is conducted in accordance with the agreed instructions (contract) of the parties and the expert must comply with those instructions, otherwise the decision could be challenged. It is also possible that the instructions give the expert complete discretion on how the process is carried out. There are no formal hearings, although the expert may meet the parties on site in construction disputes. Whilst the parties may submit evidence, the expert will investigate the facts and the law for himself and determine the outcome. The decision is binding, with limited grounds for appealing and this particularly so if the expert carries out his duties in compliance with the instructions given by the parties.

Further, there is no evidence in the literature to indicate where and in what circumstances arbitration might be considered the best option. That is to say, are there any values of claim, or size of dispute that might make arbitration the preferred option? There appears, from the literature, to be a gap in the knowledge in this respect.

[197] Brooker, P. (2002) Construction Lawyers' Attitudes and Experience with ADR. *Construction Law Journal*
Vol. 18, Issue 2 pp 97-116

3.5 DISCUSSION

As discussed in the previous chapter, the DAC recommended provisions for the new AA that it hoped would resolve the discontent that previously existed with arbitration. Indeed comments made by many academics and practitioners[198] were quite positive and they were optimistic that the AA had the potential to resolve the former problems. Comments made by practitioners and academics after the passing of the AA have been reviewed in section 3.2.1 and it is evident that problems remain with the arbitral process. These problems, together with the introduction of statutory adjudication, improvements to the court system and the rise in the popularity of mediation, have resulted in the perception that construction arbitration is in decline. It is therefore necessary, having regard to the comments made immediately above, to examine decline, or more particularly the use of arbitration and what influences its use.

Reynolds's research was on arbitration generally and not specifically construction arbitration, although he did refer to construction arbitrators carrying out one or two arbitrations per year, which was derived from interview data, but there was little empirical data. Data from the CIArb and the RICS did not separate construction from the remainder, but in any event Reynolds concluded that as arbitrators took privately arranged arbitrations, which were not recorded, the actual number of arbitrations undertaken was difficult to analyse. Black and Fenn obtained data from institutions regarding the number of arbitration appointments. Whilst there was a suggestion of declining numbers, they reported that due to incomplete records or inadequate detail, analysis was not possible. There is therefore considerable uncertainty and clearly a gap in empirical knowledge relating to the decline or otherwise, in construction arbitration and in the trend in the use of arbitration for resolving construction disputes. As the research by Burns was primarily to determine how the RICS could improve its dispute resolution service, it did not fill these gaps previously referred to.

[198] Section 2.6

Both Reynolds and Brooker referred to features of arbitration that they considered contributed to decline, or negatively affected choosing arbitration. Reynolds refers to time, cost, litigation style procedures, quality and skill as being factors that have contributed to decline in arbitration. Brooker showed that duration, cost and the adversarial approach affected the choice of arbitration in a negative way. There are many other features that may have a positive or negative effect on parties and their advisers when considering using arbitration to resolve their construction disputes. For example, being able to choose the arbitrator and the process being private are likely to be considered as positive features that might induce parties and their advisers to choose arbitration.

Features such as the unavailability of the arbitrator during the arbitral process and lawyers' fees, might be considered as negative features, putting parties and their advisers off using arbitration. The literature shows that there is a gap in the knowledge of how parties to arbitration and their advisers view various features that may have a positive or negative influence on their choosing arbitration. How they choose will subsequently reflect on decline, or otherwise, in arbitration's use. The key question arising from the forgoing that still remains to be answered conclusively is:

> *What is the trend in the use of construction arbitration and how is it influenced?*

There is no doubt that duration and cost is a problem afflicting arbitration and this is not only in the domestic scene, but also internationally as referred to in section 3.3. To control duration and cost the arbitration needs to be run in an effective and efficient manner. That is to say, that the major procedural features of arbitration that have an effect on duration and cost require to be controlled. From the literature, there does not appear to be any research that has investigated the importance of such features. The Queen Mary survey of international arbitration in 2012 suggested identifying the issues early and limiting documents, as factors for speeding up arbitration, whilst the survey of 2015 suggested that respondents were supportive of simplified procedures. These are but three features of international arbitration that reflect on duration and cost and are equally relevant to domestic arbitration. There is however, a gap in respect of empirical data showing the importance given to procedures that influence duration and cost. In addition

there appears to be no empirical data in the literature that shows whether there are issues more important to parties and their advisers, than duration and cost. By way of example, is saving cost more important than the process providing justice between the parties? Is saving time more important than getting an answer that is correct? These are the sort of matters that must be understood when considering the importance of features affecting duration and cost.

It would be expected, as a matter of course, that in determining the procedures to be used, arbitrators would consult with the parties' representatives. Further, although parties will rely on their representatives, it would be expected that representatives talk to their clients. Getting the right procedures in place, having regard to the particular dispute, will be paramount towards effectively conducting arbitration. There does not appear to be any empirical data in the literature to indicate to what extent arbitrators consult with representatives, nor the extent that representatives consult with their clients, when it come to the procedures to be used. In addition, the problem of arbitration following court style procedures existed prior to the passing of the AA and according to research by Black and Fenn, Brooker, Beynon and Reynolds, remains a problem after the passing of the AA. Evidence from academics and practitioners also indicate that it is lawyers who lean towards procedures akin to those of the courts. This is an issue that has an effect on the efficiency and effectiveness of the arbitral process. It is therefore important to determine to what extent lawyers lean towards court style proceedings. Consequently, due to the gaps referred to above, it is essential to ask the question:

> *How important are those features influencing the effective running of the arbitral process?*

Whilst not a complaint about arbitration and its procedural defects, there is no doubt that statutory adjudication, mediation and changes to litigation have had a substantial effect on the use of arbitration. These methods have been discussed in section 3.3.5. Brooker investigated if arbitration was a suitable dispute resolution method for construction disputes, the results suggesting a neutral position. The two surveys carried out in Scotland gave conflicting views, however the first survey was just after the new SAA came into effect and the second some four years after.

There is therefore limited empirical knowledge of how arbitration is considered as a dispute resolution method for construction disputes in England & Wales. Clearly, if arbitration is not considered a suitable method of dispute resolution for the construction industry, then it would certainly have an effect on its use. Its suitability therefore needs to be interrogated by the reference to the question:

How is arbitration viewed as a method for resolving construction disputes?

Reynolds refers to adjudication being the primary dispute resolution method for construction disputes, he also suggests that litigation is likely to be chosen over arbitration for large disputes, but there is no empirical data given. The literature does not appear to contain empirical data indicating where and in what circumstances arbitration might be considered by prospective disputants as the best option for resolving construction disputes. It may be that arbitration has lost out completely to other methods of dispute resolution, but disputants may have a different perspective of what might be the best method in different circumstances relating to value of claim, or complexity of issues to be resolved. The key question it raises, which is also yet to be adequately addressed empirically, is:

In what circumstances would arbitration be considered the most suitable method for resolving construction disputes?

3.5.1 Summary of Research Questions

Having considered the problems having an effect on the use of arbitration as Identified by academics and practitioners and the research carried out in respect of those problems, it is evident that there are gaps that require to be filled. The research questions revolve around using arbitration. Each research question explores some aspect of the use of arbitration, or factors influencing its use. It is therefore the matter of the use of arbitration in resolving construction disputes and the factors that influence, or have a potential bearing, on the use of arbitration that will be the focus of this thesis.

From the above the following research questions have been determined. The answers to these questions will provide data to fill the gaps in knowledge that have been identified.

1. *What is the trend in the use of construction arbitration and how is it influenced?*

2. *How important are those features influencing the effective running of the arbitral process?*

3. *How is arbitration viewed as a method for resolving construction disputes?*

4. *In what circumstances would arbitration be considered the method of choice for resolving construction disputes?*

3.6. SUMMARY OF CHAPTER

There was high hope that the AA had resolved the problems that had arisen with arbitration prior to the passing of the AA. Adverse comments continued and this chapter has examined the comments made by academics and practitioners, relating to problems influencing arbitration and potentially its use since the AA came into force. Research involving these problems has also been examined to determine the existence of gaps, requiring further research, or existing research requiring updating. Research questions have been determined to fill those gaps and the focus of the research stated. In the following chapter the aim of the research and the methodology to fulfil the aim will be pursued.

CHAPTER 4 METHODOLOGY & RESEARCH DESIGN

4.1 INTRODUCTION

The previous chapter dealt with determining the complaints about arbitration that remained post the passing of the AA. The complaints were put into groups to form themes, allowing investigation of research that had taken place in respect of those themes. This provided the necessary information to determine the gaps that existed relating to the factors that influence the use of construction arbitration. This chapter identifies the aim of the research and defines the objectives required to pursue that aim. Further this chapter deals with selecting the philosophical approach on which the research is based and the determination of the design required to gather the data to answer the research questions.

4.2 AIM OF THE RESEARCH

Blaikie[199] considers that the research questions are the most important element of research design and that the research methodology is designed to answer those questions. Oliver[200] contends it is the aims and objectives that provide the actual framework for the research. The research questions[201] are therefore paramount, as they determine what it is that the research is intended to find and they lead to the aims and objectives. Each of the research questions referred to in the previous chapter explores some aspect of the use of arbitration, or of factors influencing its use.

> *The principle aim of the research is to explore the extent to which construction arbitration continues to have a role following the Arbitration Act 1996.*

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199 Blaikie, N. (2000) *Designing Social Research.* Oxford: Blackwell Publishing Ltd. p.23

200 Oliver, P. (2004) *Writing Your Thesis.* London, Thousand Oaks, New Delhi: Sage Publications p.2

201 Section 3.5.1

4.3 THE PHILOSOPHICAL STANCE

Brewer[202] says that it is the research questions that determine the methodology to be used. That is, what theoretical perspective will be appropriate, what methods based on the theoretical perspective will be used, how data will be collected and how that data will be analysed? de Vaus[203] considers that the research design should allow the questions asked to be answered as unambiguously as possible and that any appropriate means of data collection can be used with any design. Creswell[204] describes the growing influence of mixed methods in carrying out research and describes strategies involved. Several theoretical perspectives are considered below in order to determine which might be suitable for this research.

According to Oliver[205] different writers have different ways of describing what is meant by phrases such as theoretical framework, theoretical perspective and paradigm. Whilst Creswell[206] says, there are many different types and terms used in the literature in respect of designing a framework for research. Gomm[207] uses the analogy of a toolbox, indicating that social scientists use different tools differently and interpret the results differently. Crotty[208] and Gray[209] both refer to four elements to research, being epistemology, theoretical perspective, methodology and methods. Crotty refers to epistemology "*as the theory of knowledge*", that is, understanding how we know what we know. With respect to theoretical perspective he considers it to be *"- the philosophical stance informing the methodology*" and methodology to be "the *strategy, plan of action, process, or design, lying behind the choice and use of particular methods - -".* Finally he defines methods as "*the techniques or procedures used to gather and analyse*

[202] Brewer, R. (2007) *Your PhD Thesis.* Abergele, UK: Studymates Ltd. p12
[203] de Vaus D.A. (1996) Surveys in Social Research. 4th Ed. UCL Press: London. p.83
[204] Creswell, J.W. (2003) *Research Design Qualitative, Quantitative and Mixed Methods Approaches.* 2nd Ed. London, Thousand Oaks, New Delhi: Sage Publications p208
[205] Oliver, P. (2004) *Writing Your Thesis.* London, Thousand Oaks, New Delhi: Sage Publications. p.27
[206] Cresswell, J.W. (2003) *Research Design Qualitative, Quantitative and Mixed Methods Approaches.* 2nd Ed. London, Thousand Oaks, New Delhi: Sage Publications p1
[207] Gomm, R. (2004) *Social Research Methodology a critical introduction.*Basingstoke: Palgrave Macmillan p.1
[208] Crotty, M. (1998) *The foundations of social research : Meaning and perspective in the research process. .London: Sage Publications* p.2 and 4
[209] Gray, D.E. (2009) *Doing Research in the Real World.* 2nd Ed. London, Thousand Oaks, New Delhi: Sage Publications. p.17

data - -". It is on the basis of these explanations or definitions that this thesis develops.

4.3.1 Possible theoretical perspectives

In order to determine which theoretical perspective or perspectives are suitable to answer the research questions, several are referred to below. Some theoretical perspectives rule themselves out, such as queer theory, or disability inquiry as referred to by Creswell[210] as these approaches and others not mentioned, have no relationship with the problems being studied. A general appraisal is made below of five theoretical perspectives, which might be considered as suitable for this research, because the research questions could be answered within the paradigms of these approaches.

4.3.1.1 Positivism

Positivism is based on what is frequently termed the scientific method[211]. The scientific view is that there is order in the world and that reality is independent of the observer or the views of the observer[212]. As Wisker[213] puts it, positivist thinking is that one can know the world and truth can be discovered if the right approach is made with the right questions asked in the right way. It is held by positivists that the same principles apply to the social world and that events do not randomly occur but are due to cause and effect[214]. Positivism is synonymous with empirical observation[215] with the aim that such observation does not in any way disturb, influence, or alter that being observed[216]. With the scientific method, a theory is identified from other research or literature, from which hypotheses are

[210] Cresswell, J.W.(2007) *Qualitative Inquiry & Research Design Choosing among five approaches.* Thousand Oaks, London, New Delhi: Sage Publications. pp. 28-30
[211] Goulding, C. (2002) *Grounded Theory. A Practical Guide for Management, Business and Market Research.* London. Thousand Oaks. New Delhi: Sage Publications, Denscombe, M (2002) op cit p.14
[212] Guba, E.G. & Lincoln, Y.S. (1989) *Fourth Grand Evaluation.* Newbury Park. London. New Delhi: Sage Publications p.57
[213] Wisker, G (2008) *The Postgraduate Research Handbook.* 2nd. Ed. *Basingstoke : Palgrave Mackmillan* p.69
[214] Benton, T. & Craig, I (2001) *Philosophy of Social Science.* Basingstoke: Palgrave. p.23
[215] Oliver, P. (2004) *Writing Your Thesis.* London, Thousand Oaks, New Delhi: Sage Publications p.28
[216] Denscombe (2002) op.cit. p15

produced[217], there may be multiple or a single hypotheses, which is a statement of the relationship between variables and could be considered as educated guesses based on that literature or other research work[218]. With positivism, empirical data is collected and the data is analysed to either support or reject the hypotheses. Theories that are produced require being able to withstand severe testing[219]. Only phenomena confirmed by the senses, that are objective phenomena, can be considered as true knowledge according to the positivist thinking[220].

4.3.1.2 Post-Positivism

Whilst positivists consider there is reality and truth to be discovered in the universe, post-positivists consider that reality cannot be fully known, but only approximated[221]. There is also a shift from the positive view when considering human actions, post-positivists thought is that there is no absolute truth of knowledge[222]. Post-positivists produce theories and collect data to support or refute those theories as does the positivists, but that there is uncertainty with the post-positivists position.

4.3.1.3 Interpretivism

Interpretivists hold the view that the pure scientific method cannot be applied to the social world[223]. Unlike the scientific, where in the laboratory it may be possible that the variables can be precisely controlled and precise observation made, in the social world the variables are affected by the observer. For example, when people answer questionnaires, those participating may not answer the question exactly as

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217 Cresswell (2003) op. cit.

218 Salkind,N.J. (2000) *Statistics for people who(think they) hate Statistics.*London, Thousand Oaks, New Delhi: Sage Publications p.136

219 Garratt, D. & Yaojun, L. (2005) *The Foundations of Experimental/Empirical Research Methods* in Somekh, B & Lewin, C. (eds) *Research Methods in the Social Sciences.* London, Thousand Oaks, New Delhi: Sage Publications

220 Bryman, A (2004) *Social Research Methods.* 2nd Ed. Oxford:Oxford University Press. p11

221 Denzin, N.K. & Lincoln, Y.S. (2005) *The Discipline & Practice of Qualitative Research* in Denzin,N.K. & Lincoln, Y.S. (eds) *The Sage Hand Book of Qualitative Research* 3rd Ed. London, Thousand Oaks, New Delhi: Sage Publcations. p 11

222 Cresswell, J.W. (2009) *Research Design Qualitative, Quantitative and Mixed methods approach.* Thousand Oaks, London, New Delhi: Sage Publications. p7

223 Bernard, H.R. (2000) *Social Research Methods Qualitative and Quantitative Approaches.* London, Thousand Oaks, New Delhi: Sage Publications. pp18-20

they perceive it, but have regard to what they think the researcher may be seeking and therefore have a bias either towards or against that direction. For example in a survey looking at healthy diets, with the researcher providing multiple choices of products that might be eaten, the respondent might feel that they ought to provide answers indicating that they eat more healthily than they actually do. Interpretivists do not formulate hypotheses to be supported or denied. They hold the philosophy that there are multiple realities, none of which are governed by natural laws, but are the creation of the inquiry process[224] and according to Stevenson[225] the different experiences of different researchers produce different interpretations of the phenomena being observed. Stevenson also considers that with a positivist approach there is a restriction in the information given by participants due to the constriction in both the answers that can be given to a question and the method of coding answers.

Interpretivists generally obtain data by interviewing respondents. One such perspective is ethnography, where the researcher's enquiry is into matters of culture or powers. The researcher may spend considerable time, such as a year, involved with and observing a particular group's behavioural patterns and the conditions in which they are formed[226]. Whilst there are many variations of ethnography, all will involve the researcher spending time with the group being researched[227]. Denscombe[228] says that the intention of ethnography is to understand the viewpoint of those observed and trying to see things as they see them rather than as outsiders would see those matters.

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[224] Gubba & Lincoln (1987) ob. cit

[225] Stephenson, D.A. (2002) *Arbitration Practice in construction contracts.*5th Ed. Oxford: Blackwell Science

[226] Goulding,C. (2002) op. cit. p.25

[227] Boyle, J.S. (1994) *Styles of Ethnography* in Morse, J.M. (ed) *Critical Issues in Qualitative Research Methods.* London, Thousand Oaks, New Delhi: Sage publications

[228] Denscombe, M. (2007) *The Good Research Guide for small-scale social research projects.*3rd Ed. Maidenhead; Open University Press. p63

4.3.1.4 Phenomenology

Phenomenology shares some common views with interpretivism. The method relies on observation of those with life experience in the area of the research interest[229]. Welman & Kruger[230] considers phenomenologists are concerned with understanding social and psychological phenomena from the perspective of the people involved. Denscombe[231] refers to "*Phenomenology is concerned, first and foremost, with human experience*". Therefore, knowledge comes from the experiences of the individual in living cultural and social events and that these events influence them and results in a reaction from that influence on the individual.

4.3.1.5 Pragmatism

Pragmatism has many forms[232], however Rorty[233] says that pragmatists are not interested in defining truth and that there is nothing to be gained in such an exercise. There is the view that knowledge of an object is gained by the practical relationship with that object and as the practical relationship varies so will the knowledge[234]. Pragmatism is bound into the practical, with the opinion that what works practically is true. Wisker[235] says that pragmatists are down to earth people with approaches set in the practical and seeking clear practical values. It can also be said that pragmatism is not set in one world view; it considers that the important question is the research problem and what is required to be carried out to address that problem[236]. The pragmatist will therefore use whatever system of research, whether quantitative or qualitative, or if necessary a mixture of both, referred to as

[229] Goulding, C. (2002) ob.cit. pp 22-23, Cresswell,J.W. (2003) op. cit.
[230] Welman, J.C. &Kruger, S.J (1999) *Research Methodology for the business and administrative sciences.* Johannesburg, South Africa: International Thompson.
[231] Denscombe, M. (2014) *The Good Research Guide for small- scale social research projects.*5th Ed. Maidenhead: Open University Press.
[232] Cresswell. J.W. (2009) op. cit. p 10
[233] Rorty, R. (1982) Consequences of Pragmatism. Sussex: The Harvester Press Ltd. p
[234] Benton, T & Craig, I. (2001) op. cit
[235] Whisker, G. (2008) op.cit. p 145
[236] Cresswell, J.W. (2007) op.cit. p 22-23

mixed methods. The pragmatist researcher looks at what he wishes to achieve and then looks at what method will achieve those goals[237].

4.4.1 Theoretical Perspective for this research

Theoretical perspective is the philosophical stance that lies behind the methodology; that is looking at the world and how we make sense of it[238]. Several approaches were discussed above and consideration was given as to whether one or more of these approaches would be suitable for supplying the required data. Considering the main thrust of the research is to determine the extent of the use of arbitration and the factors influencing its use and performance would require a large number of informants. The reason for this is that there are several areas in the construction process where disputes can arise. Such as variations to the original specifications of the works, defects in the structure and unexpected site conditions, to name a few of the reasons. There are also variations in the type of arbitration, such as small, medium and large, complex and simple arbitrations. Further, there are variations in the experience levels of all categories of respondents. To obtain data from just a few in each category of respondent would not cover the complex possibilities that require exploration.

As referred to in the last paragraph, there is an emphasis on using a large number of respondents and this itself leads to an empirical system. Both positivism and post-positivism use empirical data, however positivism, as referred to above, considers that there is absolute truth to be found, whereas post-positivism considers that there are uncertainties within truth. As arbitrators progress through their lived experiences, in conducting their arbitrations, attending seminars or engaging in dialogue with peers, their views on how to administer all, or just a particular power may change. Indeed, there may be one or more changes on one or more powers as time progresses. Similarly, the experiences of lawyers and

[237] Baert, P. (2005) *Philosophy of Social Sciences: Towards Pragmatism.* Cambridge: Polity Press

[238] Crotty, M. (1998) *The foundations of social research : Meaning and perspective in the research process. .London: Sage Publications* pp 7-8

users will vary. Truth will vary depending on the time of the investigation and this is not acceptable in positivism, but is acceptable from a post-positive approach.

The basis of investigating the views of respondents, having regard to their lived experience, fits in with the interpretivists' perspective and particularly that of phenomenology. These perspectives more frequently use interviewing techniques, but the need to obtain knowledge from a large number of respondents, the cost involved and the time that it would take, makes interviewing prohibitive for a large sample. Open ended questions also lie within the phenomenological and interpretivists' perspective, these allow the respondent to give whatever reply to the question that fits in with their lived experience, with the researcher having to interpret those answers. As referred to immediately above the cost of interviewing a large sample would be prohibitive, but a phenomenological approach would satisfy a small sample. Closed questions where the respondent has a choice from a set of limited replies, conforms more to post-positivism.

Clearly, as there is more than one theoretical perspective that is needed to investigate the research questions, a mixed methods approach is the most appropriate. The pragmatic theoretical perspective is an acceptable approach, as pragmatism is not set in one worldview and considers that the important question is the research problem. It therefore allows whatever system of research is necessary to address the problem, which for this research will be post-positive and phenomenology.

4.5 THE METHODOLOGY TO BE ADOPTED FOR THE RESEARCH

Having determined that a mixed methods approach is the most appropriate, the methodology is now considered. That is what strategies are used to lead to the methods for data collection.

4.5.1 Consideration of the Strategy

There are several research methodologies, with Cresswell[239] referring to two quantitative strategies and five qualitative strategies. Four strategies are discussed below, as the remainder do not readily fit the line of enquiry. For example experimental research seeks to determine if a specific treatment influences an outcome and this is not the process in this study.

4.5.1.1 Case studies

Case study is a research strategy used in many situations[240] and therefore is considered here as a possible strategy. A case study might be used for explaining a situation, or describing a phenomenon[241]. It can be used as a way of producing information that leads to future hypotheses resulting in research on a larger scale[242]. It can also be used to investigate in detail subgroups identified in a larger more general survey[243]. Arbitration is a private procedure, therefore it would require all concerned with the arbitration to agree to an outside observer being present and this might be difficult to achieve, particularly if there were sensitive issues involved in the dispute. A further consideration is that many arbitrations involve preliminary and interlocutory meetings in addition to a full hearing and it would be unlikely that the parties would have regard to the unavailability of the researcher if this clashed with availability of the parties or their advisers. The researcher might well miss vital information which could affect the accuracy of the research conclusions. Moreover the researcher would not be able to interfere with the proceedings to ask questions, to probe and to find why a particular matter in the proceedings was dealt with in that particular way. He would have to be an observer only and this would detract from the quality of the information obtainable. For these reasons a case study strategy would be inappropriate

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239 Cresswell. J.W. (2009) op. cit. pp. 12-14

240 Yin, R.K. (2003) *Case Study Research Design & Methods.* 3rd Ed. London, Thousand Oaks, New Delhi: Sage Publications. p1. O'Leary (2005) p 150

241 Edwards, A. & Talbot, R. (1999) *The hard-pressed researcher.* 2nd Ed. Harlow: Pearson Education Ltd. p 51

242 McQueen, R. & Knussen, K. (2002) *Research Methods for Social Science an Introduction.* Harlow: Pearson Education Ltd.

243 Edwards, A & Talbot, R. (1999) op.cit.

4.5.1.2 Grounded theory

Grounded theory would be a possible strategy[244], but the time and expense in obtaining and analysing open ended questions from many groups of respondents, to categorise their answers and to keep repeating these comparisons until no new categories were found, would be prohibitive. Any solely observational perspective, where the researcher merely observes or listens to the informant, for similar reasons given for case study, would not satisfactorily obtain the knowledge sought. Observation and listening would not, in many cases, determine why a particular action was taken and the researcher could well make wrong interpretations. A grounded theory strategy would also be inappropriate for the above reasons.

4.5.1.3 Survey research

As the knowledge has to come from arbitrators, lawyers and users, they need to be contacted to impart their knowledge. This leads to a survey design. Surveys enable a large sample to be obtained in a relatively short period of time, but they are not popular with potential respondents and therefore the return can be poor. This can result in the enquirer having to have follow up procedures to generate enough replies. In the 1980's there were suggestions that the response rate for surveys could be as low as 10% - 20%[245]. The contact could be face to face, but with a large sample, involving all respondents needed for this study, this would be prohibitive from both a cost and time viewpoint. Having regard to the above problems it was considered that a survey using structured questionnaires that explored the perception and opinions needed to answer the research questions would be the most satisfactory way of obtaining the appropriate data.

4.5.1.4 Phenomenological research

As referred to in 4.3.1.4 above, phenomenology relates to the first hand life experience of the group or individual in the area of the research. Whilst survey research, with face to face contact, was considered prohibitive for this research

[244] Developed by Glaser and Strauss and presented in their book *The Discovery of Grounded Theory* which was published in 1967

[245] Bailey, K. D. (1987) Methods *of Social Research.* 3rd Ed. Collier Macmillan Publishers: London. p.169

due to the large number of respondents and the associated cost, phenomenological research would be suitable for a small sample. Therefore, from the larger survey, matters identified as needing clarification or extensions were pursued by interviews with those having firsthand experience.

4.6 RESEARCH DESIGN FOR MAIN SURVEY

Having determined that using a survey methodology would be the most appropriate, the research instrument was developed. Questionnaires were designed for each of the categories of participants. In order to determine that questions were clear, unambiguous and relevant, a pilot study was undertaken. The population, sample frame and selection of the sample for each of the categories of respondent were determined. Data collection methods and analysis of data were considered.

4.6.1 Design of questionnaires

Questionnaires needed to be properly structured and this was achieved by leading the respondent through important demographic data then on to questions that logically answered the research questions. Brace[246] suggests that respondents want questions they can answer without too much effort and without taking up too much time, but when there is a requirement to obtain a lot of data, this can be difficult to achieve. Questions could have been made more simplistic, but if they do not provide the appropriate data to answer the research questions, then such questions may be of little value. A further possible problem with questionnaires is that different people can interpret the same words or phrases differently. To the respondents however, the meaning of the words connected to dispute resolution and arbitration in particular should lead to only one interpretation of the meaning of questions. This leads to high validity as respondents should be answering on the same interpretation of the question.

[246] Brace, I (2004) *Questionnaire Design*: *How to plan, structure & write survey material for effective market research.* Kogan & Page: London & Stirling VA p.9

Gomm[247] suggests that a scaled response can give a different result to those obtained where there is only a choice of yes/ no/ don't know. There are many scales available[248] however the Likert scale because it allows a response to a number of categories was considered a suitable scale to use and is often seen in social research. The Likert scale has an uneven number of categories, such that there is a neutral response available, with the opposite ends of the scale representing the two extremes, such as 'totally agree' and 'totally disagree'. In this thesis seven categories have been chosen to enable the respondent to have a wider choice of answer, to allow a more accurate assessment of their opinion or experience, but where this is not necessary a five category scale is used.

To obtain further, more detailed data, there was opportunity for the respondent to extend their answers to some questions by way of making whatever comments on the question that they may wish to make, in effect bringing about open ended responses. Having a seven point scale allows the respondent more finesse in the response and the ability to comment extends the ability to measure what is intended to be measured, thereby increasing the validity of the responses. On finalising the questionnaire before piloting, as it was quite long and having regard to the above comment of Brace regarding questions being easy to answer, consideration was given to whether the questionnaire could be shortened. However, to provide the detail required to answer the research questions, this was found to be difficult and the questionnaire remained as it was. Some of the research questions could have been abandoned, however to have done so would have depleted the value of the research.

There were three categories of respondent, each providing different demographic data. In addition, whilst there were some common questions, there were also some questions that related to one particular category of respondent. With respect to Arbitrators, it was considered that they would be able to provide additional

[247] Gomm, R. (2004) op.cit pp. 161-162
[248] Oppenheim, A.N. (1992) *Questionnaire Design, Interviewing and Attitude Measurement*. 2nd Ed. Continuum: London and New York

information regarding their own arbitrations. Information such as duration and cost involved in their arbitrations, the value of claims, the type of dispute and where their appointments came from, relate to the research questions and therefore associated with the focus of the research. Three separate questionnaires were therefore used, one for each category of respondent. These therefore provided the quantitative data used for analysis.

4.6.2 Pilot study to test the questionnaire

Whilst a good deal of time was spent preparing the questions, it is very important that the data obtained is the data required (internal validity). To test the questionnaire before it was sent out to the respondents, a pilot study was undertaken.

4.6.2.1 Participants of pilot study

Pilot studies are deemed to be essential[249], therefore a small, non-random[250] convenience sample was used. A sample of ten was made up of four main contractors, one employer, one construction consultant and three part time students. The students were studying for an MSc in either Construction Law or Construction Law & Dispute Resolution at Wolverhampton University. Each of the pilot study respondents were sent the questionnaire by email and in the same manner that the questionnaire would be sent to those in the main survey. The aim of the research was included in the email. Having regard to the aim of the pilot study each respondent was asked to comment on any ambiguity, difficulty in understanding the questions, any unnecessary questions, whether there was a need for additional questions, whether there was an adequate range of responses and how long it took to complete the questionnaire. Whilst it was not expected that the part time students would necessarily be able to answer all the questions, or provide comments on all the aspects referred to above, being students of Construction Law and Dispute Resolution, they would have a reasonable

[249] Oppenheim, A.N. (1992) op cit p.49
[250] de Vaus, D.A. (1996) op cit p. 77

understanding of the subject matter. Moreover they would be competent to comment on ambiguity and whether the questions were easily understood.

4.6.2.2 Outcome of pilot study

From the comments received, there were only two aspects requiring further consideration, these being the time taken to complete the questionnaire and whether there was a need for the inclusion of 'negotiation' as one of the methods of dispute resolution in the ranking questions. The comment regarding negotiation was that negotiation was a precursor to all of the dispute resolution methods. Whilst negotiation is used to resolve disputes, the comment helped to focus on what the ranking questions were seeking to discover. On further consideration it was concluded that it was required to determine the dispute resolution method that is preferred when the parties fail to come to an agreement after trying to do so through negotiation. That is when all the negotiating between the parties has failed and a neutral third party is required to either bring the parties together or provide a decision. It was decided therefore that 'negotiation' would be taken out of the ranking questions and the questionnaire amended accordingly. Further this revision had a knock on effect in that it reduced the length of the questionnaire to a small degree.

4.7 DETERMINING THE SAMPLES FOR THE QUESTIONNAIRE SURVEY

Clearly the arbitrator is an influence as it is the arbitrator's function to obtain a fair resolution of the dispute without unnecessary delay and expense[251]. The arbitrator is in effect the hub of the proceedings, acting like a chairperson in that he/she controls the proceedings and ultimately writes the award (the decision). There are also mandatory statutory obligations laid upon the arbitrator on how the proceedings are conducted[252]. The arbitrator is central to arbitration and therefore answering the research questions applicable to arbitrators are important to the research.

[251] Arbitration Act 1996 s.1(a)
[252] Arbitration Act s.33

The lawyer's function in arbitration is to advise their clients on their legal position and how best to present a case that will win the dispute. Solicitors may deal with all of the aspects of the case including oral representations; however barristers, trained in advocacy, are frequently engaged and particularly so in the larger cases. Lawyers therefore, as advisers, have a major influence on arbitration, particularly as there is party autonomy[253], allowing the parties to choose how the arbitration is conducted. Moreover, clients will be paying a considerable sum for lawyer advice and therefore likely to take note of what they advise. As lawyers are most likely to be engaged in construction disputes as client advisers, lawyers will be investigated in this research.

The actual parties to arbitration will also have an influence on the arbitration, but it is likely that if they engage a lawyer, that influence will be diminished as they will have devolved much of the decision making to their legal representatives. This does not mean that a party does not get involved at all, but the degree of involvement will be dependent on the time available and the importance of the result of the dispute. It is arguable that the Users of arbitration are important to the research, for although they will be influenced by their legal advisers when engaged in a specific case, they may have different opinions to their advisers on certain aspects of arbitration. It may well be that Users' opinions, such as the level of importance of different factors of arbitration or those factors that are considered as important for the effective running of arbitration, which are being investigated in this research, may differ to that of their advisers. The data from Users is therefore considered as an important contribution to the research.

4.7.1 The Population for Arbitrators

As the research considers that all practising construction arbitrators have an influence on the perception of users of arbitration, then all practising construction arbitrators is the population. For clarification, a practising construction arbitrator is considered to be one who has conducted a minimum of one arbitration.

[253] Arbitration Act 1996 s.1.

4.7.2 The Population for Lawyers

The population of construction lawyers are those who advise clients on matters relating to the resolution of construction disputes by arbitration, or who have sufficient knowledge of arbitration practice and law to enable them to complete the questionnaire.

4.7.3 The Population for Users

The full list of those who have or might in the future be involved in construction arbitration is impossible to determine. It would not be unreasonable to say that every building and engineering company, whether main contractor, sub-contractor, specialist contractor, or any of the many companies connected with building operations, such as decorators, shop fitters, scaffold suppliers and the like, could potentially be a user of arbitration as the means of resolving their disputes. This leads directly to individuals and companies/firms who are not part of the construction industry, but who have a dispute with a member of the construction industry under the terms of a construction contract, potentially becoming a user of construction arbitration as an employer of a construction company. Clearly the names of such people, companies and firms will be totally impossible to determine. There are also utility companies, such water companies, rail companies and electric companies. In addition, there are Local Authorities who also employ members of the construction industry. The entire population is therefore massive and remains unknown.

4.7.4 Sample Frame for Arbitrators

There is no physical list of every construction arbitrator who has completed a minimum of one construction arbitration. Furthermore there is not a specific academic qualification that a person has to have in order to be able to act as an arbitrator; the parties can agree to appoint anyone they wish. Such a person will however be subject to the mandatory sections of the AA and therefore subject to

the law that relates to arbitration. There may therefore be people who have conducted construction arbitration who are not members of any society or institution and there will not be any method of discovering who they are. Considering the litigious society which now exists and the law that has to be complied with, it is doubtful that there would be many, if any, such people. Franfort-Nachmias & Nachmias say that it is often the case that the entire population is unknown and that researchers usually compile a substitute list[254]. The substitute list for this thesis, appertaining to construction arbitrators, is a list of known and named construction arbitrators, together with a list from professions and organisations that are involved with both construction and arbitration and may have construction arbitrators within their membership, but are not included in the named arbitrators list.

4.7.4.1 Construction arbitrators named by organisations

There are several organisations that specifically name construction arbitrators The Society of Construction Arbitrators lists by name 43 arbitrators and 17 supporting members[255]. The Technology and Construction Bar Association lists by name 44 arbitrators[256]. The Institute of Civil Engineers lists by name 23 arbitrators[257]. The Royal Institute of British architects has 13 named construction arbitrators on their panel, whilst for the RICS there are 6. The named construction arbitrators from all of these sources is 146, however there are 13 who are named in more than one of the sources, making 133 separately named arbitrators.

From information received from the research department of the CIArb[258]., there are 20 members registered as construction arbitrators, with a further 120 who have construction and arbitration as included in their interests. An interest in arbitration or construction does not mean that they are construction arbitrators as

254 Frankfort-Nachmias, C. and Nachmias, D (1996) *Research Methods In The Social Sciences.* 5th Ed. Arnolds: London. P.181

255 http://www.constructionarbitrators.org/about-us accessed 17th February 2012

256 http://www.tecbar.org?index.asp?pageName=memberslist.asp Accessed 31st October 2012

257 http://www.disputeresolution.ice.org.uk/Search.aspx Accessed 12th July 2012

258 The information was supplied by J.C. Betancourt, Head of Research and Academic Affairs of the CIArb. The information is not available to the general public .

required for this thesis. A list of names was not provided by the CIArb., however a search of possible construction arbitrators within the UK Branches of England and Wales of the CIArb identified a further 5 construction arbitrators who were not included in the above lists. There are a number of firms that act as Claims Consultants in the construction industry. It is almost certain that any personnel in a claims consultancy firm practicing as a construction arbitrator will be a member of one of the organisations already referred to. With respect to the named construction arbitrators, the 138 referred to above were surveyed.

4.7.4.2 Lawyer construction arbitrators

Whilst there were construction lawyers in the above named list, consideration was given to the possibility of there being other construction lawyers not named. There are two professional bodies for lawyers; one being the Law Society for solicitors and the other the Bar Council for barristers. The Law Society allows searches[259] by name and by firm. The categories available with the Law Society did not include 'arbitration', or 'dispute resolution', but there was a category of 'construction and civil engineering', which listed 738 separate firms in England and Wales. The Bar Council website has Sweet & Maxwell as their official provider[260]. Searching for construction arbitrators, there were listed 85 Chambers and 9 individual barristers who are associated with construction arbitration. This was a problem in that the number of barristers' chambers and solicitors' firms was quite considerable. As all of these chambers and firms have a web site, their details were viewed and those who did not appear to deal with construction arbitration in the sense required were omitted. This allowed the number of chambers to be reduced to 28 and the number of solicitors' firms to 582. Despite this reduction, there still remained a large number of firms and chambers to contact. With respect to solicitors firms, 48 were identified as producing bulletins or updates on construction law matters, with a greater possibility of construction arbitrators being within those firms, hence these were the firms used.

259 http://www.lawsociety.org.uk/find-a-solicitor/#formtop Accessed 15th August 2012
260 http://www.barcouncil.org.uk/about-the-bar/find-a-barrister/bar-directory/ Accessed 7th August 2012

It was considered that there was more chance of individuals replying than by just contacting the clerk of chambers, or the allotted person in solicitors' firms. Where individuals were contactable this course was taken, although on many occasions the curricula vitae (CV) were not clear whether they were construction arbitrators. It was understood that many may not be construction arbitrators and therefore not in the target population. It was also understood that this would subsequently have an effect on the rate of return of questionnaires. Despite these distinct possibilities, it was considered that the more rigorous approach should be taken.

The sample frame for arbitrators were those listed by name within the various organisations and the solicitors in the 48 firms and barristers in the 28 chambers whose CV's suggested that they may be construction arbitrators.

4.7.5 Sample Frame for Lawyers

As referred to in the above section, the professional bodies for lawyers are the Law Society for solicitors and the Bar Council for barristers. To determine those lawyers who are engaged in construction arbitration, or have the knowledge to complete the Lawyer Questionnaire will be a member of one or other of these professional bodies. The situation in respect of finding such construction Lawyers are as described in 4.7.4.2 immediately above. The sample frame therefore is the 28 barrister chambers and the 48 solicitor firms.

4.7.6 Sample Frame for Users

From national statistics out of the 253,121 building companies listed, 135,048 are one-man businesses or employ only one man. If one took businesses with seven or less employees this increases to 230,879 businesses, representing over 91% of those listed[261]. Many general lists are available, but none that give any idea of

[261] www.ons.gov.uk./ons/construction-statistics/no--14--2013-edition/rft-construction-statistics-annual-2013 Accessed 26/01/16

turnover or number of employees. Initially it was intended to use the internet[262], where there is published a list of the top 150 companies by turnover. It is not unreasonable to consider that the senior management in these companies have knowledge of dispute resolution and arbitration. The generalizability from this source would be limited to the larger or more sophisticated companies. As the strategy was to send questionnaires by email, it was necessary to obtain email addresses. Many companies had as their contact a general email address and although these were used, not one reply was received. Several companies were telephoned, but to get beyond a secretary was impossible and although some secretaries asked for the questionnaire to be sent, again no one replied. Contact was made with the Civil Engineers Contractors Association (CECA) who agreed to circulate their members throughout England and Wales; this resulted in one reply. CECA agreed to re-send the questionnaire a second time, but this did not result in any additional response. It was advised by CECA that generally they found that their members filled in only those questionnaires that were basic and simple to complete.

In one of the interviews conducted[263], one interviewee said that from his experience construction companies, in order to cut down expenses due to the economic downturn, had done away with most of their staff who would have dealt with their disputes, retaining fewer legal personnel and now outsourced. As Local Authorities (LA) are employers in construction work, enquiries were made from this source[264]. As above, email addresses were not readily available for the personnel required. Phone calls resulted in either not being able to get past the receptionist, or where this was achieved being generally advised that they outsourced, although some said that they would see if they had anyone who could help. The net result however was a nil reply. An attempt to get a reply from some utility companies also resulted in a nil response. Overall, from around 75 contacts only 1 reply was obtained and on this basis it would have required 3,750 contacts to get just 50 replies, which is beyond the resources available.

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[262] www.building.co.uk/top-150-contractors-2011/top-150-companies Accessed 23/02/2012

[263] Interviews are discussed in section 4.11

[264] http://www.direct.gov.uk/en/D11/Directories/Localcouncils. Accessed 24th July 2012

To obtain data from industry could have been abandoned and the research rely on the data from arbitrators and legal advisers. This is particularly so as companies are closely associated with and are advised by their legal teams and more so in large contracts. The problem of the extremely poor response from industry came to the attention of Mr P. English, Managing Director of PJE International Ltd., who offered use of the firm's data base[265]. The firm deals with dispute management in the construction industry and in order to make as many people as possible aware of their services, they have a data base that includes employers in the construction industry, contractors, sub-contractors, architects and the like, involved in construction. Their database has been formed from all of their personal data, together with data from ABI, a construction industry analysis company, who charge for the information. In total the data base covers approximately 12,000 contacts within the construction industry.

There was the problem that there was no way of knowing of those 12,000 contacts, those who would be capable of completing a relatively complicated questionnaire. As the substantial efforts already referred to had failed to produce responses, then it was considered arguable that to use the data base of PJE International and see what resulted would be worthwhile and if respondents were not considered as suitable for the research, this endeavour could be abandoned. The sample frame was therefore the 12,000 contacts referred to.

4.7.7 Sample Size and selection of sample for Arbitrators

Sample size is a matter that causes concern. This is due to the problem that to reach certain standards of representativeness, the size of sample required can become prohibitive due to the time and cost[266] involved. A sample of the

[265] The writer of this thesis was at a seminar of the Society of Construction Law, as was Mr English, who asked how the research was progressing. Upon hearing of my difficulty in getting access to the appropriate individuals in industry, he offered to give the assistance referred to in the script. The data base is private and the company's accountant distributed the questionnaire on my behalf.

[266] Oppenheim, A.N. (1992) *Questionnaire Design, Interviewing and Attitude Measurement*. 2nd Ed. Continuum: London and New York. P. 44

population is used to obtain information that is considered as representative[267] of the population. Sample size is a factor that influences to what extent there is confidence that the sample answers are representative of what the population would answer. If therefore it is required to be 95% certain (confidence level)[268] that answers given by the sample lay within ± 5% (confidence interval)[269] of the answer that would be given by the population, then the sample size can be calculated to allow this to be achieved. The confidence level can be varied, as can the confidence interval, depending upon the required standard that is to be achieved. If the confidence level is determined and the sample size is not achieved this will increase the confidence interval, that is the ± percentage increases making it a wider margin in which the answers of the sample are likely to be the same as that of the population[270]. A further matter relating to sample size is that the smaller the population, the larger the proportion of the sample has to be in relation to the population. By way of example, if the population was 500,000 and a confidence level (95%) and confidence interval (5%) was required then the sample size required would be 384, whereas for a population of 500, the sample size would be 217. As can be seen the smaller the population, the larger the sample has to be as a proportion of the population. This is of particular importance as from the above details in the sample frame, the population of construction arbitrators is small. Moser & Kalton[271] consider that where the sample is a sizable proportion of the population, that the sample size can be reduced and they have provided a formula for this purpose. de Vaus suggests that 10% is a sizable proportion[272] and this is the case with this survey and discussed below.

There should not be confusion between the sample size referred to above and the sample size required to allow conclusions to be drawn from the data, using

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267 Ross, S.M. (2005) *Introductory Statistics*.2nd Ed. Elsevier Academic Press: Burlington, San Diego and London. P.5

268 The confidence level is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval

269 Confidence interval is the ± percentage that you can be sure that the answer picked by the sample will be if picked by the population.

270 de Vaus, D. (2001) op. cit. p.189-190

271 Moser,C.A. and Kalton, G. (1971) Survey methods in Social Investigation. 2nd Ed. Heinman Educational Books : London. p147

272 deVaus, D.A. (1996) Surveys in Social Research. 4th Ed. UCL Press: London. p.72

inferential statistics. Edwards & Talbot[273] suggests that if one is to go beyond descriptive statistics, a sample size of at least 30 will be required.

Response rates also had an influence on the decisions relating to sample size. Rates of return to surveys are now generally low according to Pew Research Centre[274], reporting that response rates had dropped from 36% in 1997 to 9% in 2012. Further, it has to be borne in mind that the people from whom the information was required for this research are highly paid and more importantly likely to be under a heavy workload, therefore the actual cost to those filling in the questionnaire is considerable, which is not conducive to obtaining a good response. These reasons alone are sufficient to suspect a low response rate. If 20% of the named arbitrators referred to above responded, which is double that which might be expected if the rate is near to that reported by Pew Research Centre, this would have provided for only 26 responses, which is below the figure that statisticians consider necessary to perform inferential statistics. The need to survey barristers and solicitors in addition to those named construction arbitrators is therefore justified, despite the fact that the survey will include some who are not in the target population.

Consideration was given to random sampling, but if this was undertaken and those barrister chambers and solicitor firms as identified as more likely to have construction arbitrators were missed in the random sampling process, this could be devastating as much of the target population could be missed. As referred to above, the CIArb, which is the primary professional body for arbitrators[275], indicate there are only 140 members who, potentially, might be construction arbitrators. On this assumption that the population of construction arbitrators is small, it was decided to attempt to survey as many of the population of construction arbitrators as possible. Clearly this cannot wholly be achieved as there will be some

[273] Edwards, A. & Talbot, R. (1999) op. cit. p. 37

[274] Pew Research Centre www.people-press.org/2012/05/15/assessing the representativeness-of-public-opinion-surveys/ Pew Research say that the decline in response rates is evident across nearly all types of surveys. Accessed 20/06 /2015

[275] Reynolds (2014) ob cit p22 suggests that all arbitrators in England & Wales will be CIArb members

arbitrators who will not be identifiable. The result of trying to sample as many construction arbitrators as possible is that the sample is not random, which affects which methods of analysis are used and is discussed below. Further, confidence levels cannot be calculated as the process relies on the data being obtained using random sampling methods. The sample size therefore, due to the above explanations, is not a specified number from the outset, but is as many of the population of construction arbitrators that could be found. The sample selection is all those named arbitrators, together with construction arbitrators from the 28 barristers' chambers and the 48 solicitors' firms referred to above.

4.7.8 Sample Size and selection of sample for Lawyers

It is likely that the number of construction lawyers will be small, therefore as many of the population as possible were sought. It is again repeated that the majority of construction lawyers are engaged in a small number of firms and chambers. This is a further reason why random sampling has not occurred, for if the well-known firms and chambers were not selected in a random sample, many construction lawyers would be excluded from the survey. Questionnaires were therefore sent to all of the lawyers or their firms (28 barrister chambers and the 48 solicitor firms).

4.7.9 Sample Size and selection of sample for Users

In the sample frame referred to in 4.7.6 above, there was no facility to use any form of sampling technique for the 12,000 people in the data base. The only option open was to survey the whole 12,000.

4.8 DATA COLLECTION

The data collection for the three categories of respondent is shown below. This includes demographic data to show the makeup and experience of the respondents, the non-response details, response rates and an assessment of the suitability of the sample for the purposes of the research.

4.8.1 Data collection for construction Arbitrators and construction Lawyers

As referred to above the data was collected using email with the respondents having access to a web address to which to make their response. With respect to the named individuals, their email addresses, both direct or by firm, are available and these were used to send the questionnaires. With regard to Chambers, where it was possible to obtain direct contact with the individuals this was done, otherwise the questionnaire was sent to the Clerk of Chambers. Similarly with solicitors' firms, the questionnaire was sent to individuals where possible, otherwise to a member of the firm. As the data is collected at a single period of time, the design is cross- sectional and gives results that apply only to that period. There may, with the passage of time, be a change in attitude to some or all of the questions. Attitudes can be changed by future determinations of important legal points by the courts. Those determinations then influence how arbitrators deal with those particular points and even more so if those determinations are Supreme Court decisions as these have to be complied with as there is no higher court to overturn their decisions.

4.8.2 Data Collection for Users

A questionnaire using Survey Monkey was produced and this was attached to the data base of PJE International Ltd and forwarded to all of those on the data base.

4.9 DATA ANALYSIS STRATEGY

The analysis of the data falls into two groups, that of descriptive and that of inferential. The distribution of frequencies, means and standard deviation has been used to describe the data. For inferential analysis, there are parametric and nonparametric tests. Parametric tests require some assumptions to be fulfilled, whilst for nonparametric tests there are no assumptions. Two key assumptions for parametric tests are that the distribution of the data will be normal and that data

will be measured on the interval scale[276]. A test can be made to determine whether a distribution is normal or not[277].

Most of the questions on the questionnaire use the Likert scale with categories 1 to 7, although there are some with scales 1 to 5 and some yes/no. These are closed questions. There are several questions that allow respondents to comment further and are therefore open-ended. Open-ended responses will be coded and categorised to be included in the analysis. Sirkin[278] says that although the Likert scale is an ordinal scale, if a points system is used allocating points to each code (he uses 5 point intervals), allocating points in this manner can be considered as an interval scale. He acknowledges that this violates some mathematical assumptions, but says that it is common practice in the social and behavioural sciences. Ross[279] refers to parametric and nonparametric tests, where he considers that if sample sizes are large, that is above 30[280], then, even if the distribution is not normal, the normal test will be satisfactory. He goes on to say that with large samples either the parametric t-test can be used or the nonparametric rank- sum method, both are acceptable. He does caution however, that the t-test is designed to detect differences in the means, whilst the rank-sum test is designed to detect differences in distributions. Norman[281] considers that parametric tests are so robust that violations of assumptions will not render the answers obtained wrong.

As some of the distributions are not normal and there has been an attempt to survey the entire population, rather than using samples that have been randomly selected, non-parametric tests have largely been used. For tests of significance

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276 Field, A. (2000) *Discovering Statistics Using SPSS for Windows.* London. Thousand Oaks. New Delhi: Sage Publications. pp. 37-38

277 Field, A. (2000) op cit pp. 46-49

278 Sirkin, R.M. (2006) *Statistics for the Social Sciences,* 3rd. Ed. London, Thousand Oaks, New Delhi : Sage Publications. p.71-73. Sirkin acknowledges that there are breaches of some mathematical assumptions

279 Ross, S.M. (2005) *Introductory Statistics.* 2nd Ed. London New York Tokyo: Elsevier Academic Press. P.656

280 Ross, S.M. (2005) op cit p. 447

281 Norman, G. (2010) Likert scales, levels of measurement and the "laws" of statistics. *Advances in Health and Sciences Education.* Vol 15 Issue 5 pp 625-632

the accepted value of $p < .05$[282] has been used throughout. The tests used are explained at the point use.

4.10 INTERVIEW PHASE

Having regard to the research questions, it was clear that there would be a substantial amount of data produced from the questionnaires to answer those questions. This in itself was likely to produce some inconsistencies, or matters, that were not entirely clear after the analysis of the responses. Further, the analysis of much of the data considered not only the overall view of the three main players to arbitration, but also a separate analysis of each of the players' data, this extends the possibility of needing further clarification of the results. A further influence on considering using interviews was that many of the researchers referred to, in addition to obtaining quantitative data, also obtained interview data, for example Brooker, Baynon, Reynolds and the Queen Mary International Surveys[283]. Whilst the empirical survey was the main source of the data, it was considered sensible to extend the scope of the research by conducting interviews. This therefore provided for both quantitative and qualitative data.

As discussed in section 4.4.1 (theoretical perspective) and 4.5.1.4 (phenomenological research), these underpin the use of interviews as a method of obtaining data. Having decided to conduct interviews, the questionnaire had a question asking if the respondent would take part in an interview. There is some bias as only those willing to be interviewed were included in the selection of the sample. There were 6 Lawyer respondents willing to partake in an interview and 8 Arbitrators.

[282] Field, A. (2013) *Discovering Statistics Using IBM SPSS Statistics*. Los Angeles, London, New Delhi, Singapore, Washington : Sage Publications. p. 63

[283] Sections 3.3.1 and 3.4

4.10.1 Design of interviews

There were areas of the research where additional information was required to help understand a result derived from the questionnaire. For example the questionnaire data suggested that there had been a decline in the number of arbitrations. Constructing a question for interviewees to provide possible reasons why this had occurred expands the original question to providing a causal link to the reduction in the number of arbitrations. Results from the questionnaires provided several opportunities to seek more detail, however the number of questions that could be put to interviewees had to be restricted in order that the interviews were not too long. Bearing in mind that the interviewees had already completed a long questionnaire it was considered that an interview of 15 -20 minutes would not be too excessive. Questions were therefore designed around the more important subjects that would benefit from the clarifications. Questions where there would be no major benefit from the addition information were disregarded. Four questions were identified from Arbitrators data and six from Lawyers data. Interviews were semi-structured, thereby allowing respondents to extend their answer beyond the actual question asked. There were two separate sets of questions, one for arbitrators and one for lawyers, with three common questions. More detailed discussion on interviews is presented in section 9.2.

Initially it was intended to conduct face to face interviews, however most interviewees preferred telephone interviews which they considered would be less intrusive on their time. Out of the 14 interviewees, two interviews were face to face, a further two would have been face to face, but getting mutually convenient times proved difficult, therefore these and the remaining interviewees were interviewed by telephone.

4.10.2 Analysis of interview data

All interviews were recorded and the details analysed similar to the methods used in social science with coding and categorising of responses. As there is a slight

modification of the social science method, which is more fully described in section 9.2. The analysis is dealt with in Chapter 9.

4.11 SUMMARY OF CHAPTER

The aim of the research has been discussed, together with the objectives to be pursued to achieve that aim. The philosophical stance underpinning the research has been determined, leading to the methodology to be adopted and the strategy used to collect the data. A survey using questionnaires was considered the most appropriate method of collecting the data. In addition to the questionnaires, the use of interviews, to improve the understanding of aspects arising from the questionnaire data was considered. The population and sample frame for each of the three categories of respondent have been justified and the sample to be used for each category has been identified. Details of how the data was collected have been provided. Using interviews and validating the findings has been justified. The next chapter deals with demographic details of the respondents, response rates and the suitability of the samples obtained.

CHAPTER 5 PROFILE OF RESPONDENTS AND GENERAL INFORMATION

5.1 INTRODUCTION

Having determined the sample frame in the previous chapter, this chapter examines the profiles of the respondents completing, or substantially completing, the questionnaires. Additionally, statistical data provided by Arbitrator respondents relating to aspects of their own arbitrations are analysed. Non-responses to the questionnaires and response rates are also discussed. Consideration is also given regarding the suitability of data for each category of respondent for inclusion into the analyses.

5.2 DEMOGRAPHIC DETAILS FOR ARBITRATORS

There were 35 responses from arbitrators who completed or substantially completed the questionnaire and the details of the respondents are shown below. Matters of response rates are dealt with separately below[284].

5.2.1 Professional background of respondents

Table 5.1 shows the distribution of the professional backgrounds. As can be seen there is a range of six professions, which is a good representation of the different disciplines required to deal with the various types of construction disputes. There is also a reasonable balance between data from the legal profession (40%) and those with technical qualifications (60%). Individually by profession, quantity surveyors had the largest representation (34.3%), with barristers (31.4%) the second largest representation.

[284] Section 5.8

Table 5.1 Professional background of Arbitrator respondents

Professional background	frequency	percentage
Solicitor	3	8.6%
Barrister	11	31.4%
Building surveyor	1	2.9%
Architect	2	5.7%
Quantity surveyor	12	34.3%
Engineer	6	17.1%
TOTAL	**35**	**100%**

5.2.2 Number of arbitrations conducted

There was a requirement that respondents should have conducted a minimum of one arbitration. This stipulation was to ensure that respondents had actually had experience of conducting arbitration. The questionnaire laid out six ranges for the number of arbitration conducted by the respondent. Ranges were used as it would be unlikely, other than for those having conducted a few arbitrations, the respondent would know the exact number that they had presided over; hence it is not possible to give the exact number of arbitrations each respondent has conducted. Further the mean of the number of arbitrations cannot be given. From the table below it can be seen that there is representation of experience in all of the ranges. There are 38.2% having conducted fewer than 10 arbitrations, 47.1% (almost half) have completed over 25 arbitrations and 38.5% who have conducted over 50 arbitrations .

Table 5.2 Range of the number of arbitrations conducted

Range of the number of arbitrations	1 - 5	6 - 10	11 - 25	26 - 50	51 - 100	100+	total
Frequency	6	7	5	3	3	10	**34**
Percentage	17.6%	20.6%	14.7%	8.8%	8.8%	29.5%	**100%**

The sample therefore contains a wide range of experience levels.

5.3 STATISTICAL DETAILS OF ARBITRATIONS CONDUCTED BY ARBITRATOR RESPONDENTS

Arbitrator respondents were asked for additional information about their own arbitrations, which added data in the area of cost, duration and the use of arbitration, these being matters relating to the focus of the research. Arbitrator respondents were therefore asked about cost and duration of their arbitrations. In addition information was obtained regarding the frequency of the different types/category of disputes and from whom the respondents received their instructions. As these are factual data and not opinions and have been collected as part of the data specific to Arbitrator respondents, the analyses are dealt with at this point.

5.3.1 Mean value of claim in arbitrations conducted

Respondents were requested to provide the approximate mean value of claims that they have dealt with during the past five years. The mean of these values is £6,944,590, median of £165,000, the minimum being £50,000 and the Maximum £75,000,000. The values provided by the respondents were specific figures, however these have been put into ranges of value for the purpose of the presentation.

Table 5.3 Range of value of claims conducted by Arbitrator respondents

Range of values of claims	frequency	percentage
Up to £50,000	5	15.6%
Over £50,000 up to £100,000	8	25.0%
Over £100,000 up to £500,000	10	31.3%
Over £500,000 up to £1 million	1	3.1%
Over £1 million up to £10 million	5	15.6%

Over £10 million up to £50 million	1	3.1%
Over £50 million	2	6.3%
Total	**32**	**100%**

As can be seen from Table 5.3, there is a wide range of value of claim. The mean of the values is high due to the inclusion of two values of over £50 million, therefore the median is a better measure of central tendency. It is noted that 71.9% of the values do not exceed £500,000 and 75% of the values lie under £1 million. Therefore, in respect of the respondents for this research, a large majority of claims are under £1 million.

5.3.2 Mean duration of arbitrations conducted

The duration of arbitrations is a factor that causes concern, as the longer the arbitration takes to get to completion, the uncertainty of the outcome of the arbitration remains. This can be a problem to the parties as they may have to hold back money in the event they lose the arbitration in its entirety, or have to pay for some issues lost, resulting in money being tied up that otherwise would be used in other areas of their business. Respondents gave the mean duration of their arbitration conducted during the past five years, resulting in a mean of 48.9 weeks duration, median 39 weeks, with a minimum of 1 week and maximum of 130 weeks. These results have been put into table form, with periods of thirteen weeks (each three months) to more readily appreciate the frequencies. As can be seen from Table 5.4 only 34.3% are completed within 6 months and 68.7% within 12 months, leaving 31.3%, almost one third, taking over 12 months. This indicates that according to this sample arbitration, generally, takes a long time to complete whether considering the mean or the median.

Table 5.4 Duration of arbitration conducted by Arbitrator respondents

Period in weeks	< 13	14-26	27-39	40-52	53-65	66-78	79-91	92-104	105-117	118-130	total
Frequency	4	7	6	5	3	3	0	2	1	1	**32**
Percentage	12.5	21.8%	18.8%	15.6%	9.4%	9.4%	0%	6.3%	3.1%	3.1%	**100**

	%										**%**

A correlation test was undertaken to determine the relationship between the value of claim and the duration of arbitration. As the sample was not normal, but the sample size statistically would be considered as large[285], Spearman's rho test was applied, this being a non-parametric correlation test. This showed that value of claim was significantly related to the duration of arbitration, r =.427, 95%BCa CI [.010, .742] p=.017. Whilst the correlation coefficient r = .427 shows a large effect[286], it cannot be used to show causality. The coefficient of determination R^2 = 0.182, therefore the value of claim and the duration of arbitration share 18% of their variability. Whilst the correlation coefficient does not show causality, intuitively it would not be unreasonable to consider that a larger claim might, generally, take more time to resolve than a smaller one, although it may not necessarily be the case.

5.3.3 Mean cost of arbitrations conducted

The cost of arbitrations has also been a factor of concern and was a matter that the AA was intended to remedy, again more fully discussed in Chapter 2. There were only fifteen respondents who completed the question as to the mean cost of the arbitrations that they had conducted over the past five years. The figures given did not include the cost of the arbitrator. Several respondents answered that the parties had settled the costs between them, whilst some could not remember. Whilst the number of respondents who answered the question is small (15), none the less the data provides useful information. The mean cost in respect of the sample is £418,000, median £60,000, with the minimum cost of £10,000 and maximum of £5,000,000. The data is presented in Table 5.5, using bands of cost, from which it can be seen that for 20% of the responses the cost is less than £25,000 and just under a half (46.6%) costs are £50,000 or less, leaving over 50% with costs over £50,000.

[285] Ross, S.M. (2005) *Introductory Statistics.* 2nd Ed. London New York Tokyo: Elsevier Academic Press. P.656 suggests that statistically a sample size of 30 and over is large.
[286] Field, A. (2013) op.cit. p. 270

Table 5.5 Cost of arbitration conducted by Arbitrator respondents

Cost	Frequency	Percentage
Up to £25.000	3	20%
Over £25,000 to £50,000	4	26.6%
Over £50,000 to £100,000	3	20%
Over £100,000 to £200,000	3	20%
Over£200,000 to £250,000	1	6.7%
Over £1 million	1	6.7%
TOTAL	**15**	100%

It would be expected that there would be a relationship between the duration of arbitration and cost of arbitrations. As the sample is small Kendal's tau[287] was selected as a measure of correlation between the two variables, rather than Spearman's rho, resulting in r = .518, 95% BCa [.102, .815], p = .010. There is therefore a significant relationship between the duration of arbitration and the cost of arbitration. The coefficient of determination R^2 = 0.268, therefore the cost of arbitration and the duration of arbitration share 27% of their variability. As for the above the correlation coefficient cannot be used to determine causality, but it would not be unreasonable to expect that generally as the duration of arbitration increases, so will the costs.

5.3.4 Frequency of different categories of dispute

Due to the complexity of construction works and the involvement of many possible parties, such as employer, main contractor, specialist subcontractor, subcontractor and the like, there are a variety of situations where a dispute could arise. The questionnaire provided a list of six categories which are generally catered for in standard forms of contract, including 'other' and requested that the respondent

[287] Field, A. (2013) op. cit. p. 278

indicate the order of frequency that each of the categories arose in the arbitrations they had been involved in. Table 5.6 shows the weighted means for each category of dispute. The table is made up of the actual scores for the frequency chosen, multiplied by the weight given, this being 6 for the most frequent down to 1 for the least frequent. This enables an overall assessment to be made of how frequent a dispute arises in the different categories of dispute. As is evident from Table 5.6, Loss & Expense is the category with the highest weighted mean, followed closely by Variations. Therefore, these categories, according to arbitrator respondents, are the more frequent categories of dispute.

Table 5.6 Weighted means of categories of dispute

Category	Most frequent 1	2	3	4	5	Least frequent 6	**Weighted mean**
Weight	**6**	**5**	**4**	**3**	**2**	**1**	
Workmanship	13x6=78	0x5=0	6x4=24	7x3=21	2x2=4	3x1=3	**6.2**
Extension of time	14x6=84	0x5=0	7x4=28	6x3=18	4x2=8	0x1=0	**6.6**
Loss & expense	13x6=78	12x5= 60	4x4=16	1x3=3	2x2=4	0x1=0	**7.7**
Variations	11x6=66	8x5=40	9x4=36	2x3=6	2x2=4	0x1=0	**7.2**
Design	7x6=42	0x5=0	7x4=28	5x3=15	8x2=16	4x1=4	**5.0**
Other	5x6=30	3x5=15	0x4=0	1x3=3	3x2=6	10x1=10	**3.1**

Several respondents made the comment that large disputes often involve most or all of the different categories. Further, several respondents marked more than one category as the most frequently arising category and this is evident from the details shown in the table. With respect to the category ‘other’ respondents referred to ‘repudiation or termination of the contract’ and to ‘defects in components and materials’. It is not possible to determine the frequencies of the different issues that make up the ‘other’ category.

5.3.5 Sources of appointment for Arbitrators'

Respondents were asked to provide details of the frequency of how they were appointed, either by being named in the contract, by an appointing body or by some other means. Twenty respondents provided information. There was a response for 'other' means of appointment and from comments; engagement was either through the parties, or their solicitors. Again, weighted means have been calculated and as shown in Table 5.7 below, nominating bodies provide the most frequent source of appointment, closely followed by being directly appointed by the parties or their solicitors. Being named in the contract is the least frequent category from the data supplied.

Table 5.7 Weighted means for sources of appointment

Sources of appointment	most frequent	second most frequent	third most frequent	**Weighted mean**
Weight	**3**	**2**	**1**	
Named in contract	0x3=0	1x2=2	19x1=19	**3.8**
By nominating body	11x3=33	8x2=16	1x1=1	**22.0**
By parties/solicitors	9x3=27	10x2=20	1x1=1	**20.3**

5.4 DEMOGRAPHIC DETAILS FOR CONSTRUCTION LAWYERS

There were 54 responses from construction lawyers who completed or substantially completed the questionnaire. Details relating to the respondents are shown below. Response rates are dealt with in a later section[288].

[288] Section 5.8

5.4.1 Type of lawyer & practice

Participants were requested to state what type of lawyer they were and in what type of practice they were involved. Below Table 5.8 shows the details. As is readily observable 64.8% are solicitor respondents and 35.2% barrister respondents. Whilst there are far more solicitors than barristers, nonetheless there is a sizable proportion of respondent barristers.

Table 5.8 Frequencies for type of lawyer

Type of lawyer and practice	frequency	percentage
solicitor in sole practice	1	1.9%
solicitor in multi- solicitor practice	34	62.9%
practicing barrister	18	33.3%
non- practicing barrister	1	1.9%
TOTAL	**54**	**100%**

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5.4.2 Number of years qualified

There were 54 respondents who gave the number of years of their experience since qualifying. The data has a range of 36 years, this being from 2 years post qualification experience to 38 years post qualification experience. The mean number of years is 17.13 with standard deviation of 9.51. Table 5.9 below shows the distribution over five year periods from 1year to 40 years.

Table 5.9 Number of years qualified for Lawyer respondents

Years post qualification	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	total
Frequency	6	7	11	14	5	7	1	3	**54**
Percentage	11.1%	13.0%	20.4%	25.9%	9.3%	13.0%	1.8%	5.5%	**100%**

As can be seen with the frequencies of the distribution, there is representation in each of the periods, showing that all levels of experience are represented. There are 24.1% with fewer than 10 years experience, 55.6% with experience between11

and 25 years and 20.3% with experience of over 25 years. There is therefore, a wide range of experience levels.

5.4.3 Additional qualifications

Of the 54 respondents, 17(31.5%) had additional qualifications and 37(68.5%) did not have any further qualifications. The additional qualifications were mostly membership of the Chartered Institute of Arbitrators and/or an MSc in Construction Law.

5.4.4 Involvement with arbitration

There was a question asking whether the respondent had, in any capacity, been involved with arbitration. Of the 54 respondents, 51(94.4%) had been involved in an arbitration and 3(5.6%) had not. Therefore all but 3 have direct experience of construction arbitration.

5.5 DEMOGRAPHIC DETAILS FOR USERS OF ARBITRATION

As the sample is large and not achieved by random sampling and having 46 responses, demographic details of the respondents, shown below, were considered before making the decision as to whether to abandon the data from Users or to include it.

5.5.1 Position in company

It was important to establish whether the respondents were likely to be in a position to complete the questionnaire in a competent manner. As 87% of the respondents hold managerial positions and above, they should be in a position to be able to complete the majority of the questionnaire. Those in the position of project leader should also have the experience and knowledge to complete the questionnaire as people in such a position are generally directly involved with the

dispute process. The largest group of respondents are managers at 37%, followed by directors at 32.6%.

Table 5.10 Position held in company for User respondents

Position held within company	frequency	percentage
Chairman	1	2.2%
Managing Director	7	15.2%
Director	15	32.6%
Manager	17	37.0%
Project leader	6	13.0%
TOTAL	**46**	**100%**

5.5.2 Size of company in terms of turnover

It was decided that the most satisfactory way of assessing the size of company was to use turnover as there appears to be more information available relating to turnover than there is the number of employees in a company. There will be companies that have a large turnover with comparatively few employees, however on balance the turnover was the accepted parameter for this survey. The categories of turnover size were determined intellectually. The turnover category of '£50 million and over' has the highest frequency of 18 (40.9%), with the second highest frequency being category 'under £5 million' with 12 (27.3%). Moreover, there is a reasonable representation from all categories of turnover.

Table 5.11 Size of company in terms of turnover

Turnover of company	frequency	percentage
Under £5 million	12	27.3%
Over £5 mill. under £10 mill.	6	13.6%
Over £10 mill. under £50 mill.	8	18.2%
£50 mill. and over	18	40.9%

TOTAL	**44**	**100%**

5.5.3 Years of experience of users

There is a wide range of experience levels, with the minimum number being 5 years and the maximum being 55 years. The average number of years experience is 31.57 years with a standard deviation of 12.1. All respondents therefore have considerable business experience, with over 80% having more than 20 years experience. This is another factor to support the suitability of the respondents to complete the questionnaire. There are a reasonable number of respondents above and below 30 years experience, but any variation between such groups could not realistically be based on lack of experience.

Table 5.12 Years of experience of User respondents

Years experience	1 - 20	21 - 30	31 - 40	41 - 50	Over 50	TOTAL
Frequency	9	16	9	11	1	**46**
Percentage	19.6%	34.8%	19.6%	23.9%	2.1%	**100%**

5.5.4 Experience of arbitration

The respondents are almost equally split with regard to direct experience of arbitration, with 22 having been directly involved with arbitration and 24 not. Therefore a little over half of the sample gave an opinion based on their opinion having not been involved directly in arbitration, whilst the remainder were able to draw on some experience of arbitration.

5.5.5 Decision for including User data

From the above, it can be seen that the Users who responded are representative of a wide range of entities. All respondents hold responsible positions, with 87% having management positions or above. The range of business experience is

good, with 80% having more than 20 years experience and 48% have had direct experience of arbitration. From this data it is likely that those that responded are sufficiently representative of the population. The important point is that the respondents are in a position that enables them to answer the research questions. Having 46 respondents who completed, or substantially completed, the questionnaire, is sufficient for inferential statistics to be used[289]. It was therefore decided to include the data from Users. Data is combined with the data from the other categories of respondent to give an overall result and is also shown separately. The analyses do not indicate anything untoward from that which might reasonably be expected, which is another factor that is supportive of including the User data.

5.6 NON-RESPONSES – ARBITRATOR AND LAWYER

As would be expected, for reasons explained in more detail in section 4.8.4.2, due to not being able to determine precisely the target population, not all of those to whom the questionnaire were sent responded, as they were not in the target population. Further, there will have been potential respondents in the target population who did not respond. Respondents made comment that partially explained why they had not filled in the questionnaire. Some said that they were just too busy to spare the time. Several said that they were inundated with questionnaires and could not possibly fill in all that were sent to them. Some said that the questionnaire was too long. More disturbing was that as the questionnaire was being dealt with electronically, there was difficulty in the page turn of the questionnaire, which apparently was very slow according to several respondents. Upon checking this assertion on different computers it was found that there was a considerable variation from a few second for the page turn, to around half a minute. Enquiry with the IT department at the university yielded no solution. It is therefore considered that some would not complete the questionnaire due to frustration.

[289] Ross, S.M. (2005) *Introductory Statistics.* 2nd Ed. London New York Tokyo: Elsevier Academic Press. p. 447

There has been much dialogue regarding non-response in research surveys. The problem is not the number of non-responses, but whether those who did not respond are uniquely different from those who did respond[290]. If therefore those who did not respond are different to those who did respond, then there would be non-response bias. The literature indicates that those who do not respond are similar to those who respond late. The Kolmogorov-Smirnov non-parametric test was applied to determine whether there was any significant difference between the responses from those who replied within 4 weeks of receiving the questionnaire and those after 4 weeks (including the responses to reminders). The Kolmogorov-Smirnov test was used as this is considered a better test where the sample is less than around 25[291]. A 4 week period was arbitrarily selected as it is not too long a period having regard to recipients having to fit a reply into a probably busy schedule. Not all data was tested, however those data considered as the more important to the research were tested. With respect to Arbitrators, out of 55 features tested, there was only one feature where there was a significant difference (appendix G). Regarding Lawyers out of 84 features tested, there was only one where there was a significant difference (appendix H). From this data it is indicative that the respondents who completed the questionnaire within 4 weeks are similar to those who completed the data later than 4 weeks. As the difference between those responding early and those responding late is insignificant, it is arguable that those not responding are not uniquely different to those who responded. The salient factor as to whether the questionnaire was completed related to the time available and the knowledge to complete the questionnaire. Moreover, comments received from those who did not fill in the questionnaire did not in any way indicate that they were different to those who did complete the questionnaire. The inference from this is that there is unlikely to be a non-response bias and therefore the sample is likely to be representative of the population.

[290] Marketing Research Association www.marketingresearch.org/survey-nonresponse Accessed 02/03/2015
[291] Field, A. (2013) ob.cit. p.223

5.7 NON-RESPONSES – USER

Similar to the Arbitrator and Lawyer response, the target population was unknown as there was no way of knowing who, within the sample, was able and capable of completing the questionnaire. There is some guidance from enquiries made to Local Authorities and construction companies why potential respondents do not reply. These largely were that they outsourced their construction disputes and/or they did not have personnel within their departments who had the knowledge to partake in the survey. A comment received from one construction company was that they now had a policy not to participate in questionnaire surveys. Another comment was that the questionnaire was long. A further comment from one contractor's organisation was that their members, generally, only reply to the most simplistic questionnaires, that is if they reply at all.

Out of 84 features tested for significant differences between those replying to the questionnaire within 4 weeks to those beyond 4 weeks, there was only one feature where there was a significant difference (appendix I). The inference from this, taking the same arguments as made for the Arbitrator and Lawyer samples, is that there is unlikely to be a non-response bias.

5.8 RESPONSE RATE - ARBITRATORS

The questionnaire was originally sent out via a facility of the University of Wolverhampton and as described in section 5.5, some problems were encountered with the speed of page turnover. The questionnaire was reproduced in word and sent out again for a second time and in most cases a third time. Further several people were telephoned where it was thought that the response rate might be increased. This resulted in 9 further replies. Regard had to be given to the possibility of being accused of harassment as was inferred by one potential respondent.

Although referred to in section 4.8.4 above, it cannot be over emphasised that in order to maximise the number of construction arbitrators partaking in the research, it was necessary to contact barristers and solicitors who only might be construction arbitrators (this also applies to construction lawyers). Not to investigate barristers and solicitors as fully as practically possible, could lead to accusations of a lack of rigour. Further, there is little risk of the wrong person completing the questionnaire, as firstly it is long and secondly very complex for those lacking the appropriate knowledge. It is also considered that with barristers and solicitors, it is unlikely that they would waste, what would be expensive time, on such an exercise.

Whilst it is arguable that the response rate is considerably distorted by using all of those potential respondents from solicitor and barrister listings, nonetheless the detail cannot be ignored. 610 individuals or firms were contacted, with 42 who completed all or part of the questionnaire; however there were 35 who completed all or most of the questionnaire and it was their responses that were used for the analysis. There were a further 56 who responded to advise either they were not construction arbitrators, or lacked sufficient knowledge to complete the questionnaire; that is, they were not in the target population. The 35 substantially completed questionnaires as a percentage of 554 (610 – 56) is 6.3%. Whilst this is a low percentage, currently response rates, generally, appear to have fallen. Further, the inclusion of those who had to be contacted because it could not be predetermined whether they were or were not construction arbitrators, has distorted the percentage rate of response.

5.9 RESPONSE RATE - LAWYERS

There were 480 separate individuals or chambers/firms contacted. There were 81 who completed or partially completed the questionnaire, however those who completed all or most of the questionnaire were 54 and their responses were used for analysis purposes. Those who advised they were not construction lawyers and therefore not part of the target population totalled 56. The 54 who substantially completed questionnaires as a percentage of 424 (480 – 56) is 12.7% response

rate. Having regard to the level of current response rates, this is considered to be a reasonable response rate.

5.10 RESPONSE RATE - USERS

As there were 46 responses and 12,000 people contacted, the response rate is only 0.4%. This is extremely low, but will be considerably distorted due to there being 12,000 contacts and a large number will not be in the target population.

5.11 SUITABILITY OF RESPONSES FOR THIS RESEARCH

The responses from all three categories of respondent as to whether they are suitable to be included in the research are considered below.

5.11.1 Suitability of Arbitrators' responses

The response rate is low, but as previously explained, this is likely to be distorted due to having to contact people who may or may not be construction arbitrators. As referred to previously, anecdotal evidence suggests that those in this area of dispute resolution consider that the number of construction arbitrators is small and this is supported by the number of potential construction arbitrators registered with the CIArb at 140, referred to above in section 4.8.4.1. If a substitute population as referred to by Frankfort-Nachmias and Nachmias[292] was to be considered as 154, that is the CIArb figure of 140 plus a further 10% to allow for others that may exist and not registered with the CIArb., then the response rate, having regard to the 35 completed or near completed questionnaires would be 23%. This would remain a low percentage, but considerably higher than that when using the number of people contacted. The matter of response bias was dealt with in section 5.5, where the inference was that there is unlikely to be non-response bias.

[292] Frankfort-Nachmias, C. and Nachmias, D (1996) *Research Methods In The Social Sciences.* 5th Ed. Arnolds: London. P.181

With regard to the contention in section 5.5, that those who completed the questionnaire are likely to be representative of the population, there is other supportive evidence. From the data in Table 5.1 there are technical and legally educated arbitrators and it might be thought that if there were significant differences between arbitrators, that this would be an area of difference. A statistical test using the non-parametric Kolmogorov- Smirnov test was again used to test for significant differences over 45 questions and there were none that showed any significant difference, indicating that there is no significant difference between arbitrators coming from a legal background to those from a technical background. Further, considering the population of construction arbitrators, they are professional people, most or all being educated in the arbitral process in a common manner. Additionally the rules governing any arbitration in England & Wales have to comply with the mandatory requirements of the AA, thereby restricting differences between arbitrators that otherwise might exist. Having regard to the data concerning the respondents shown in Tables 5.1 & 5.2, it can be seen that there is a wide range of experience in conducting arbitration and a wide range of disciplines represented, both technical and legal. From this supporting information it is likely that those respondents completing or near completing the questionnaire are representative of the population. The data obtained is therefore suitable for the analysis and inferences appertaining to this research. Versta Research[293] in a newsletter, whilst confirming the need to comply with good research practices considered '*that what matters is not how many people respond to a survey, but how representative they are of the group to which they belong'.*

5.11.2 Suitability of Lawyers' responses for this research

The response rate is a little above that which might be expected for the current times according to Pew Research[294], but for reasons explained above it is arguable that it is artificially lower than it might have been had it not been

[293] Versta Research is a market research & public opinion polling firm. www.verstareasearch.com/contact.htlm Accessed 20/06/2015

[294] Pew Research Centre www.people-press.org/2012/05/15/assessing the representativeness-of-public-opinion-surveys/ Accessed 20/06/2015

necessary to contact people who were not in the target population. As also explained previously, to get responses from those forming the population is difficult due to the cost in time and money to the respondents.

It was considered in section 5.5 that it is unlikely that there is a non-response bias and that the inference was that those who responded were representative of the population. Additionally, to support this contention, it might be considered that there could be differences between solicitors' responses and those of barristers, however the Kolmogorov- Smirnov test for significant differences over 83 questions resulted in there being no significant difference between the answers. Whilst solicitors and barristers differ in their ultimate training, they both usually have law degrees or the equivalent and therefore their basic understanding of the law will, most likely, be the same. Moreover, they are all trained in dealing with disputes in court, which itself, is governed by the CPR. Further, the AA also restricts those involved, to comply with a number of statutory obligations.

Considering the data concerning the respondents shown in Table 5.4, it can be seen that there is a wide range of experience, with the average number of years qualified being 17.5 years. In addition 94% of the respondents have had experience of construction arbitration. From this data it can be argued that the sample is representative of the population of construction lawyers and therefore suitable for the analysis and inferences appertaining to this research.

5.11.3 Suitability of Users' responses for this research

The suitability of the sample was discussed in section 5.4.5 above where it was argued that the sample was suitable to be included in the research. Additionally information in section 5.6 regarding the reasons why people did not respond and the conclusion that there was not likely to be a non-response bias are supportive of the data being suitable.

5.12 ANALYSIS OF DATA FOR ALL CATEGORIES OF RESPONDENT

Matters relating to data analysis have been discussed in section 4.10. Generally, non-parametric tests have been used as they do not require assumptions to be fulfilled, such as normal distribution and random sampling. For tests of significance the accepted value of $p < .05$[295] has been used throughout.

5.13 SUMMARY OF CHAPTER

Demographic data of the respondents has been analysed. Data from arbitrator respondents relating to their own arbitrations has been analysed. Response rates and non- responses have been discussed, together with an assessment of the suitability of the samples. The use of non-parametric tests has been explained together with justification for use of parametric tests, where deemed necessary. These lead to the next chapter where the use and the trend in the use of arbitration are investigated. Further, factors influencing Users and Lawyers towards or away from choosing arbitration are considered.

[295] Field, A. (2013) *Discovering Statistics Using IBM SPSS Statistics*. Los Angeles, London, New Delhi, Singapore, Washington : Sage Publications. p. 63

CHAPTER 6 THE USE OF CONSTRUCTION ARBITRATION

6.1 INTRODUCTION

The last chapter dealt with the demographic details of respondents, non-responses and response rates. It also analysed data from Arbitrator respondents in respect of their own arbitrations. In addition there was consideration of the suitability of each category of respondent in respect of its inclusion in the analysis of data. Having determined these matters, it enables analysis of collected questionnaire data to continue. This chapter deals with the empirical data gathered from all three categories of respondent regarding their perception of how the use of arbitration has changed. Additionally the change in the number of disputes in the construction industry since the passing of the AA is investigated. This enables an assessment of whether any change in the use of arbitration is due to a change in the number of disputes. Furthermore, a bank of factors that potentially influence parties when contemplating whether or not to use arbitration to resolve their construction dispute are also considered. These provide answers to Research Question 1 which was stated as "*what is the trend in the use of construction arbitration and how is it influenced?"*

6.2 DEALING WITH MISSING DATA

Missing data does cause some concern, but Hosker[296] cautions against making up values, which clearly should not be done. There are many ways of dealing with missing values[297]. One method is to completely discard incomplete questionnaires. There were a number of respondents who failed to complete a large part of the questionnaire and in those circumstances their responses were disregarded. There still remained some gaps in the data, some as the particular question was not applicable to the respondent and some because the respondent did not know the answer. For example, if a question asked if the respondent had been involved in a particular matter and they answered that they had not, then the respondent is not

[296] Hosker,I (2008)Statistics for social science. Studymates Ltd.; Newcastle-under-Lyme p. 94

[297] Jamshidian,M. (2004) Strategies for Analysis of Incomplete Data. In Handbook of Data Analysis; Editors Hardy, M & Bryman,A. Sage; London. Thousand Oaks. New Delhi

likely to be able to answer a question that expands on that matter. Questionnaires that were substantially completed were used. Using SPSS, there is facility to deal with missing data. In the analysis for this thesis, actual missing data, where a respondent failed to answer a particular question or part of a question -9 was inserted for the answer. Similarly where the respondent did not know the answer -20 was inserted and where a question had no applicable answer to the respondent -10 was used. Instructions to SPSS allow such values to be disregarded in the particular test being undertaken without affecting the rest of the data for a particular question. As Field[298] suggests, data that has been missed out by respondents for some particular reason, does not mean that the data that is available should not be used. The above explanation regarding missing data is applicable to all analysis involving questionnaire data.

6.3 STATISTICAL TESTS USED IN THIS CHAPTER

As referred to previously in section 4.10, non-parametric tests were used as far as possible. Tests used in this chapter are:-

1. Chi-square
2. One sample t- test
3. Principal component analysis
5. Mann- Whitney
6. Wilcoxon signed-rank test

The reasons for using the tests will be referred to at the point of use.

6.4 TRENDS IN THE USE OF CONSTRUCTION ARBITRATION

The trend in the use of construction arbitration has been assessed by considering how the respondents, from their experience/perspective, consider what changes, if

[298] Field, A. (2013) Discovering Statistics Using IBM SPSS Statistics. Sage; Los Angeles, London, New Delhi, Singapore, Washington DC p108

any, have occurred in the use of arbitration over two specific time periods. Two 5-year periods were selected with periods being measured from 2013 (year of data gathering) and the periods being 2008 to 2013 (referred to hereafter as first 5-year period) and the second period being from 2002 to 2007 (referred to hereafter as the second 5-year period). Differences between the two 5-year periods provide a trend. It was decided not to go beyond ten years, due to peoples' memories and the accuracy when one tries to go back over long periods. The size of arbitration (i.e. small, medium and large), has also been used as a variable in order to determine its influence on the overall use of arbitration during the periods of time under consideration. Data has been collected from Lawyers, Arbitrators and Users and has been assessed for the combined scores of all respondents over the three sizes of arbitration to provide an overall result. This has then been broken down further into combined scores of all respondents, but for each size of arbitration, namely small, medium and large arbitrations. This enables the determination of the effect of the different sized arbitrations on the overall result. The scale used is a five-point scale, therefore there is a neutral at category 3 representing no change in the number of arbitrations, with categories (1+2) representing a reduction in the number of arbitrations and categories (4+5) an increase.

6.4.1 Overall use of arbitration combining all respondents and all sizes of arbitration for first 5-year period

The combined data from the three categories of respondents for all sizes of arbitration provides an overall opinion and shown in Table 6.1. There are 143 (47.35%) who consider there has been a decrease in the number of arbitrations, whilst 66 (21.85%), are of the opinion there has been an increase. There are 93 (30.79%) who consider there has not been a change.

Table 6.1 Frequencies for the use of arbitration for all respondents and all sizes of arbitration for first 5-year period

COMBINED – Lawyers, Arbitrators & Users. For **all sizes** of	Significantly reduced 1	2	3	4	Significantly increased 5	TOTAL	median

arbitration							
Total	**85**	**58**	**93**	**49**	**17**	**302**	**3.00**
% of grand total	28.15%	19.21 %	30.79 %	16.22 %	5.63%	100%	

The median of three of the distribution would suggest that, overall, there is no change in the number of arbitrations for this first period, however only 93 were of this opinion. Considering that there are 143 of the opinion of a reduction in the number of arbitrations and 93 for no change in the number of arbitrations, chi-square test was applied on the basis that the expected scores would be equal. This resulted in $\chi^2 = 10.598$ which is greater than χ^2 for $p < .01$, therefore, the number of respondents of the opinion that there has been a reduction in the number of arbitrations is significantly larger than those considering that there has been no change in the number of arbitrations. Similarly, those considering a reduction to those an increase in the number of arbitrations resulted in $\chi^2 = 27.64$, which is beyond χ^2 for $p < .001$, therefore those who believe there has been a reduction in the number of arbitrations is significantly larger than those for an increase. Overall therefore, the respondents believe that there has been a significant decrease in the number of arbitrations over the first 5-year period.

6.4.2 Use of arbitration combining all respondents for each size of arbitration for first 5-year period

A review was undertaken of the combined scores of all respondents, but for each size of arbitration to determine whether respondents' perceptions varied with the size of arbitration. Frequencies of the distributions for the combined data for the three sizes of arbitration are shown in Table 6.2. For small arbitrations the frequencies for a reduction in the number of arbitrations is 55 (55.56%), no change is 27 (27.27%) and for an increase in the number of arbitrations is 17 (17.17%). With respect to medium arbitrations, the reduction in the number of arbitrations is 47(46.54%), for no change 34(33.66%) and for an increase 20(19.80%). For large arbitrations for a reduction in arbitration the scores are 41(40.20%), no change 32(31.37%) and an increase 29(28.43%).

Table 6.2 Frequencies for the use of arbitration for all respondents and for each size of arbitration for first 5-year period

COMBINED – Lawyers, Arbitrators & Users	Significantly. reduced 1	2	3	4	Significantly. increased 5	TOTAL	median
small arbitrations	37	18	27	14	3	**99**	**2.00**
medium arbitrations	24	23	34	14	6	**101**	**3.00**
large arbitrations	24	17	32	21	8	**102**	**3.00**

Table 6.3 shows chi-square tests between categories (1+2), suggesting a decline in the number of arbitrations and category 3 representing no change in the number of arbitrations, for small, medium and large arbitrations. Chi-square shows in small arbitrations $\chi^2 = 8.890$, $p<.01$, with medium arbitrations $\chi^2 = 1.778$, $p>.10$ and large arbitrations $\chi^2 = 0.877$, $p>.25$, therefore only in small arbitrations is there a significant difference between the number of respondents considering a decrease in the number of arbitrations to those of no change in the number of arbitrations.

With respect to the difference between a decrease in the number of arbitrations and an increase, there are more respondents considering that there has been a decrease, however it is only for large arbitrations $\chi^2 = 1.729$, $p>.10$ where there is no significant difference between the decreased frequencies and increased frequencies. There is a significant difference for small ($\chi^2 = 19.014$) and medium ($\chi^2 = 10.090$) arbitrations between those considering a decrease to those of an increase. Taking an overall view, that is the differences between a decrease in the number of arbitrations, no change and an increase in the number of arbitrations, it is only in small arbitrations where there is a significant reduction in the number of arbitrations. For medium and large arbitrations the differences are not significant. Further as the size of the arbitration increases the difference between those considering a decrease and those an increase in the number of arbitrations

diminishes, indicating that there is less of a reduction in the number of arbitrations as the size of the arbitration increases.

Table 6.3 Chi-squared tests for number of arbitrations: decrease and no change: decrease and increase - for first 5-year period

COMBINED – Lawyers, Arbitrators & Users	categ (1+2)	categ 3	chi squared	signif	categ (1+2)	categ (4+5)	chi squared	signif
small arbitrations	55	27	χ^2= 8.890	p<.01	55	17	χ^2=19.014	p< .001
medium arbitrations	47	34	χ^2= 1.778	p>.10	47	20	χ^2=10.090	p<.001
large arbitrations	41	32	χ^2=0.877	p>.25	41	29	χ^2=1.729	p>.10

The findings for the first 5-year period are that, overall, respondents' perception is that there has been a significant reduction in the number of arbitrations. Breaking this down into the three different sized arbitrations and having regard to those respondents considering there has been a decrease in the number of arbitration, no change and an increase in the number of arbitrations, it is only in small arbitrations where there is a significant difference. For all sizes of arbitration there are more who consider a decrease to that of an increase and it is the cumulative effect that has resulted in the overall result showing a significant decline in the number of arbitrations.

6.4.3 Overall use of arbitration combining all respondents and all sizes of arbitration for second 5-year period

Table 6.4 shows the scores for the combined responses of all respondents and for all three sizes of arbitration, together with the percentage for each category of response. Those respondents considering a reduction in the number of arbitrations, that is categories (1+2) is 162(56.45%) with categories (4+5) being

48(16.72%) for an increase. There are 77 respondents (26.83%) who consider that there has not been a change.

Table 6.4 Frequencies for the use of arbitration for all respondents and all sizes of arbitration for second 5-year period

COMBINED – Lawyers, Arbitrators & Users. For **all sizes** of arbitration	Significantly reduced 1	2	3	4	Significantly increased 5	TOTAL	median
Total	**76**	**86**	**77**	**43**	**5**	**287**	**2.00**
% of grand total	26.48%	29.97%	26.83%	14.98%	1.74%	100%	

Using chi-square test between the number of respondents considering a decrease to those of no change in the number of arbitrations resulted in $\chi^2 = 29.523$ with $p < .001$, therefore there is significantly more of the opinion that there has been a reduction in the number of arbitrations compared to those of no change. With respect to those respondents considering a reduction in the number of arbitrations and those considering an increase, chi-square test resulted in $\chi^2 = 60.804$ with $p<.001$, therefore there is a significant number of respondents who consider that there has been a decrease in the number of arbitrations compared to those who consider an increase. Overall respondents consider that there has been a significant decrease in the number of arbitrations.

6.4.4 Use of arbitration combining all respondents for each size of arbitration for second 5-year period

The combined scores of all respondents for each size of arbitration are now considered. The number of respondents considering a reduction in the number of arbitrations is larger than those for no change, or for an increase in the number of arbitrations, for all sizes of arbitration. For small arbitrations the number of respondents considering a decrease in the number of arbitrations is 60(63.83%), for no change 21(22.34%) and for an increase in the number of arbitrations

13(13.83%). For medium sized arbitrations the corresponding figures are reduced 58(60.42%), no change 24(25.00%) and increased 14(14.58%) and for large arbitrations, reduced 44(45.36%), no change 32(32.99%) and increased 21(21.65%).

Table 6.5 Frequencies for the use of arbitration for all respondents and for each size of arbitration for second 5-year period

COMBINED – Lawyer, Arbitrator & User	Significantly. reduced 1	2	3	4	Significantly. increased 5	TOTAL	median
Small arbitrations	30	30	21	13	0	94	**2.00**
Medium arbitrations	25	33	24	14	0	96	**2.00**
Large arbitrations	21	23	32	16	5	97	**3.00**

To determine for each size of arbitration whether there is any significant difference between the number of respondents of the opinion that there has been a reduction in the number of arbitrations and those respondents who consider there is no change or an increase in the number of arbitrations, chi-square test was used and the results shown in Table 6.6.

Table 6.6 Chi-squared tests for number of arbitrations: for second 5-year period

COMBINED – Lawyer,Arbitrator & User	categ (1+2)	categ 3	chi squared	signif	categ (1+2)	categ (4+5)	chi squared	signif
small arbitrations	60	21	χ^2=17.827	p<.001	60	13	χ^2=28.986	p< .001
medium arbitrations	58	24	χ^2=13.280	P<.001	58	14	χ^2=25.681	p<.001
large arbitrations	44	32	χ^2=1.592	p>.05	44	21	χ^2=7.446	p<.05

Table 6.6 shows the results for the decrease in the number of arbitrations, to no change and an increase in the number of arbitrations. For small arbitrations the respective results are $\chi^2 = 17.827$ and $\chi^2 = 28.986$, for medium arbitrations $\chi^2 = 13.280$ and $\chi^2 = 25.681$ and for large arbitrations $\chi^2 = 1.579$ and $\chi^2 = 7.446$. Therefore, the respondents believe that there has been a significant decline in the number of arbitrations for small and medium arbitrations, with a decline in large arbitrations, but not a significant one. Further the number of respondents considering a decrease in the number of arbitrations to those of an increase, diminish as the size of arbitration increases.

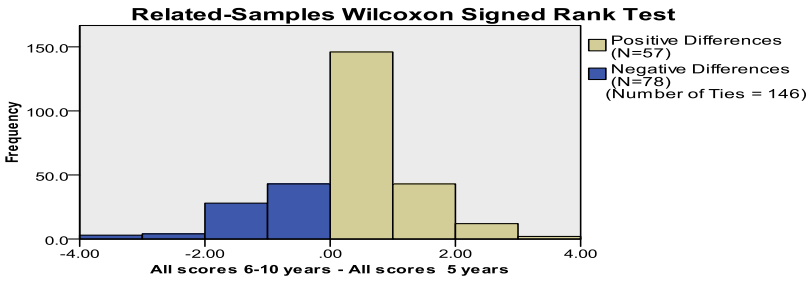
The findings for the second 5-year period is that, overall, there are significantly more respondents who consider that there has been a reduction in the number of arbitrations for the second period of 5 years than those respondents who consider that there has been no change or an increase in the number of arbitrations. Breaking the analysis down to size of arbitration, only for large arbitrations is there no significant difference between the number of respondents who consider a decrease in the number of arbitrations compared to no change in the number or an increase in the number of arbitrations. For small and medium arbitrations the comparisons are significantly different. It is also evident that as the size of the arbitration increases, there is less of a reduction in the number of arbitrations, that is the larger the arbitration the less the effect of the reduction in the number of arbitrations.

6.4.5 Trend in the use of arbitration between the two 5-year periods

To determine the trend in the use of arbitration over the past ten years from the data collection in 2013, the first 5-year period has been compared to the second five 5-year period. How arbitration has changed between the first 5 years from 2013 (referred to as A) and the second 5 year period (referred to as B), the combined scores of all the respondents for all of the sizes of arbitration was compared. As data for the combined score for each of the two periods were provided by the same respondents, the Wilcoxon signed-rank Test was used. This

resulted in there being a significant difference, p = .007, between the two sets of data. This does not give the trend, but by entering the model viewer in SPSS, the details of the differences between each set of scores is displayed including the number of positive and negative differences, as shown below in Fig 6.1.

The differences have been determined by subtracting, for each respondent, the score for A from the score for B. To get a negative result the score for A has to be higher than that for B. As the scale for collecting the data goes from 1(significantly reduced) to 5 (significantly increased), a score which is higher than another score means that it is closer to the significantly increased category than the other score. As there are 78 negative differences and 47 positive differences, the scores are generally higher in the A period and therefore in or closer to the increased number of arbitrations categories than period B. The trend therefore, is that from the second 5-year period to the first 5-year period the respondents consider that there has been a movement towards an increase in the number of arbitrations. As established above, both periods of time showed, overall, respondents believed there was a significant decrease in the number of arbitrations. Therefore whilst there has to be a positive effect to change a larger decline into a smaller decline, the trend is expressed as a significant slowing down of the decline in the use of arbitration from the second 5-year period to the first 5-year period.



Total N	281
Test Statistic	3,407.500
Standard Error	439.008
Standardized Test Statistic	-2.694
Asymptotic Sig. (2-sided test)	.007

Figure 6.1 Trend in the use of arbitration using Wilkoxon signed rank test

The combined scores of the three categories of respondents for small, medium and large arbitrations were also investigated to determine whether this data supports the above. For reasons referred to above Wilcoxon signed-rank test was used and all have a larger number of negative differences. Small arbitrations combined, positive = 21, negative = 26 and p = .257. For medium arbitrations combined, positive = 17, negative = 27 and p= .018 which is significant. For large arbitrations combined, positive = 19, negative = 25 and p = .248. Whilst all sizes of arbitration show a trend towards a slowdown in the decline of arbitration, it is only for medium sized arbitrations that the trend is significant.

6.4.6 Findings in respect of the use and trend of construction arbitration

Overall, respondents perceive that there has been a significant reduction in the number of arbitrations for both periods of time under investigation. However the findings reveal that for both periods of time, generally, there is less of a decrease in the number of arbitrations as the size of the arbitration increases.

With respect to the trend in the number of arbitrations for the two time periods and the answer to the first part of Research Question 1, the combined respondents indicate that there has been, to a significant degree, less of a decline in the number of arbitrations in the first 5 year period compared to the second 5 year period. When considering the size of arbitration, it is only medium sized arbitrations where the trend is significant. Small and large sized arbitrations also show that the trend is towards a slowing down of the reduction in the number of arbitrations, but not to a significant degree.

Reasons put forward regarding the decline in arbitration and the trend in arbitration are discussed in section 10.2 as this involves other areas of the research.

6.5 FREQUENCY OF DISPUTES SINCE THE PASSING OF THE AA

Respondents were asked to what extent they agreed/disagreed that there are now fewer disputes in the construction industry than prior to the Arbitration Act 1996 (AA) coming into force. This question was asked in order to determine the possibility of any change in the number of arbitrations being due to a change in the number of disputes. As can be seen from Table 6.7, with respect to the combined data of the three categories of respondent there are 34(28.81%) who agree and 68(57.63%) who disagree that there are fewer disputes since the passing of the AA. Chi-squared was used to investigate whether there was any significant difference between the number of respondents who considered that there were fewer disputes to those who considered that there were no fewer disputes[299]. The result was $\chi^2 = 10.676$ which is considerably larger than the critical value for χ^2 for $p<.05$ which is 3.841, therefore the number of respondents who are of the opinion that there are no fewer disputes is significantly larger than those who consider a reduction in the number of disputes, even at the $p<.01$ level. Further the median for the distribution of combined scores is in category 4, suggesting that respondents disagree that there are fewer disputes since the passing of the AA.

Table 6.7 Frequencies for change in the number of disputes

Arbitrators Q12 Lawyers Q15 Users Q 17	1 totally agree	2 agree	3 neutral	4 disagree	5 totally disagree	total	median
Lawyer	5	7	8	18	11	49	4.00
Arbitrator	7	9	1	9	7	33	3.00
User	2	4	7	12	11	36	4.00
Total	**14**	**20**	**16**	**39**	**29**	**118**	**4.00**
% of total scores	11.86%	16.95%	13.56%	33.05%	24.58%	100%	

[299] As above the neutral score was not included and the expected scores for agree and disagree were taken to be equal.

Considering the data individually, that is Lawyers, Arbitrators and Users. Arbitrators have the same number for categories (1+2) as for categories (4+5), therefore they consider that there has not been a change in the number of disputes. Lawyers for categories (1+2) have 12 and for categories (4+5) there are 29. With respect to Users, for categories (1+2) there are 6 and for categories (4+5) there are 23. Therefore for both Lawyers and Users there are more respondents who disagree with the statement. Chi-squared test result for Lawyers was χ^2 = 6.224 and for Users χ^2 = 8.828, both are above the critical value for χ^2 for $p<.05$. Therefore, for both Lawyers and Users, there are significantly more who consider that there has not been a reduction in the number of disputes compared to those who consider that there has. Further, the median for the distribution of both Lawyers and Users is 4.00, indicating that Lawyers and Users disagree that there are now fewer disputes since the AA came into force.

The finding therefore is that, overall, respondents consider that there has not been a reduction in the number of disputes since the passing of the AA**.** As referred to in sections 6.4.1 to 6.4.3, there has been a significant reduction in the number of arbitrations since 2003. It can be inferred however, that the reduction in the number of arbitrations over this period is not due to a reduction in the number of disputes.

6.6 FEATURES OF ARBITRATION HAVING A POSITIVE OR NEGATIVE EFFECT ON CHOOSING ARBITRATION

In order to complete the answer to Research Question 1, it is necessary to investigate the features of arbitration that parties and their advisers consider lead them to, or away from, using arbitration. The questionnaire sought to determine how respondents rated various features of arbitration as to the effect they have on their choice of arbitration. The rating scale used was a seven point Likert type scale, with 1 representing a significant negative effect on their choosing arbitration and 7 as a significant positive effect on their choice. The scores for Lawyers and Users were evaluated and tabulated. As there is a neutral score of 4, this allows all

the negative scores (1+2+3) and all the positive scores (5+6+7) to be evaluated. Those factors having a larger total positive score than total negative scores, are taken as positive factors and the total positive scores calculated as a percentage of the total scores (positive and negative) for that feature. A similar process has been undertaken for total negative scores. A one-sample t- test was used to determine the significance of the measured means compared to the hypothetical mean of 4, this being the neutral position on the scale. Where the significance value, p> .05 for a feature, it is taken that the feature is for practical purposes neutral. The parametric t-test was selected as this compares the two means, as opposed to the non-parametric Wilcoxon signed rank test, which compares medians.

In the first instance, the results of the data from Lawyers and Users have been combined and analysed to give an overall result. This is followed by analysing Lawyers and Users data individually and comparing results. With respect to the combined data of Lawyers and Users, after separating the features into positive and negative responses, principal component analysis was carried out for each. Principal component analysis determines those factors that have the strongest correlation with each other and clusters these together. Consideration was then given to what label could be assigned to each cluster that encompassed the meaning of these closely related features.

6.6.1 Features of arbitration having a positive or negative effect on choosing arbitration, using combined data of Lawyers and Users

The data for Lawyers are contained in Question 21 and Users in Question 19 of their respective questionnaires (hereafter Question will be abbreviated to Q), which were combined to provide for an overall result. There are two variations between the questionnaires for Lawyers and that of Users, however the same features from each questionnaire have been matched for the combined data. From the combined data the means and standard deviation for the distributions of each feature have been calculated together with the significance values from the t-test.

The features that are not significantly different from neutral are included in the tables referred to below and are in bold to identify them. Considering that means of under 4 represents a negative opinion of a particular feature of arbitration and a mean of over 4 represents a positive feature, there are 12 positive features and 12 negative features. The positive and negative features are shown separately in Tables 6.8 and 6.9. It is taken that the larger the positive mean, the closer it is to significantly positive, whilst the smaller the negative mean, the closer the feature is to significantly negative.

Additionally the total negative and positive responses have been converted to percentages in relation to the total number of responses of those who answered the question, including neutral responses, and this is included in both Table 6.8 and Table 6.9. Percentages are given to the nearest whole number. The percentages have been calculated to provide a simple assessment of the number of scores a particular feature has received. As is evident from these tables, the order of size of percentages do not fit exactly the order of the size of means, however, as the mean is a more accurate interpretation of the distribution, the mean has been used to determine the order of each feature, rather than the percentage.

6.6.1.1 Features of arbitration having a positive influence, using the combined data of Lawyers and Users

There are 12 features of arbitration having a positive effect when considering choosing arbitration as the method of resolving construction disputes. These are shown in Table 6.8 and are arranged in order of the size of their means.

Table 6.8 Features of arbitration having a positive influence on choice of arbitration, combining Lawyers and Users data

Combined- positive features	Score (5+6+7)	N	%	mean	SD	p value
1. the award is binding	77	86	90%	5.40	1.40	.000

2. the process is private	59	88	67%	5.27	1.37	.000
3. reasonable opportunity to present their case	62	88	71%	5.16	1.25	.000
4. reasonable opportunity to deal with other parties case	61	88	69%	5.13	1.18	.000
5. parties are able to choose the arbitrator	48	88	55%	4.88	1.41	.000
6. procedures of arbitration are flexible	50	87	57%	4.80	1.32	.000
7. winning party get their costs	45	88	51%	4.67	1.33	.000
8. decisions provide justice between the parties	42	88	48%	4.64	1.46	.000
9. procedures can be tailored to suit case	40	86	47%	4.60	1.35	.000
10. parties can influence procedures chosen	43	88	49%	4.55	1.20	.000
11. appeals against the award are severely limited	43	88	49%	4.39	1.75	.041
12. parties can agree to exclude appeals on errors of law	26	86	30%	4.03	1.52	**.832**

The first four features have means above 5.00 and have between 67% and 90% of respondents' scores. The binding nature of arbitration, being held in a private forum and with the ability to deal with their own and the other party's case are therefore likely to be the most influential features in deciding to use arbitration. Features 5 to 7, being able to choose the arbitrator, flexible procedures and the winning party getting their costs, have percentage scores from respondents above 50% and likely to be influential, but probably to a lesser degree than the first four features. The remaining features may not have much influence, but nonetheless are likely to have some influence. With respect to feature 12, parties agreeing to exclude appeals on errors of law, this is considered as neutral and therefore neither a positive or negative effect towards choosing arbitration.

6.6.1.2 Features of arbitration having a negative influence, using the combined data of Lawyers and Users

There are 12 features of arbitration having a negative effect on choosing arbitration as the method of resolving construction disputes, which are shown in Table 6.9 in order of the size of their means. The feature having the greatest influence against choosing arbitration is the cost involved, with this feature having

a noticeable low mean of 3.16 and 63% of respondents considering cost to be a negative feature when it comes to choosing arbitration. The features 2 to 7 have means that are separated by only 0.09 and the percentage scores are 50% or above. These features: lack of confidence in arbitrators' decisions; delays due to party advisers and arbitrators; complexity of procedures and being too much like litigation; are according to respondents to be approximately equally negative. Whilst the cost of arbitration is clearly the greatest influence against choosing arbitration, there is not a great deal between any of the negative features and their means lie within 0.44 of each other. Further, none of the means are below category 3 and therefore none are seriously negative. The cost of arbitration is dealt with in more depth in sections 10.5 as cost reflects in several areas of the study.

Table 6.9 Features of arbitration having a negative influence on choice of arbitration, combining Lawyers and Users data

Combined- negative features	Score (1+2+3)	N	%	mean	SD	p value
1. the cost of arbitration	55	88	63%	3.16	1.76	.000
2. there is a lack of confidence in arbitrators decisions	45	86	52%	3.27	1.23	.000
3. delay, unavailability of party advisors	43	86	50%	3.27	1.12	.000
4. complexity of procedures used	44	87	51%	3.28	1.20	.000
5. first choice arbitrator often not available	45	84	54%	3.29	1.14	.000
6. delays unavailability of the arbitrator	44	86	51%	3.35	1.11	.000
7. it is too much like litigation	43	86	50%	3.36	1.30	.000
8. lawyers reluctant to depart from court style procedure	40	85	47%	3.42	1.39	.000
9. lawyers fees a substantial part of overall cost	41	86	48%	3.43	1.61	.000
10. too adversarial	39	87	45%	3.48	1.29	.000
11. lawyers prefer adversarial approach	40	84	48%	3.49	1.40	.001
12. complexity of arbitration law	36	86	42%	3.60	1.44	.013

6.6.2 Principal Component Analysis – Combined data Lawyers and Users

Whilst factor analysis and principal component analysis (PCA) are different techniques, most of the practical issues are the same according to Field[300]. As the output from SPSS refers to principal component analysis, this will be the term used. Both systems use correlation coefficients and determine clusters of variables that correlate with each other. With factor analysis clusters are referred to as factors, whilst in principal component analysis they are referred to as components. Principal component analysis is used not only to determine the features that have a correlation with each other, but also to produce a shortened statement that expresses the meaning of the features that make up the component. This in turn allows amalgamation of components to provide a brief summary representing both positive and negative features. It is not necessarily a reflection of the degree of influence that the features have on the respondents when considering using arbitration as the method of resolving their disputes.

6.6.2.1 Determining components of positive features of arbitration from the combined data of Lawyers and Users

Taking the positive features referred to in section 6.5.1.1, these were analysed to determine the various components and the different features that made up each component. The analysis incorporated the varimax rotation. Three factors had eigenvalues over Kaiser's criterion of 1 and between them explain 62.84% of the variance. In this case the required standards were achieved with the determinant being .002, which is well above the minimum value of .00001as referred to by Field[301]. The Kaiser-Meyer-Olkin measure for sampling adequacy was .74 and is a good value according to Hutcheson & Sofroniou[302] and therefore acceptable. The Bartlett's test for sphericity was also applied which requires the result to be significant and as the test produced a significance of .000 indicating that the correlation between variables is significantly different from zero and therefore satisfactory. Table 6.10 shows the components with their loading. Features that

[300] Field, A. (2013), *Discovering statistics using IBM SPSS statistics*. 4th Ed., Los Angeles, London, New Delhi, Singapore, Washington DC : Sage p. 667

[301] Field, A. (2013) op.cit. p.695

[302] Hutcheson, G & Sefroniou, N (1999) *The multivariate social scientist.* London :Sage in Field,A. (2013) op. cit. p. 685

are included in more than one component and have a low loading are not duplicated and are used in only one component.

Table 6.10 PCA components for positive features of arbitration from the combined data of Lawyers and Users

Rotated Component Matrix[a]

	Component		
	1	2	3
Procedures can be tailored to suit the case	.848		
Procedures of arbitration are flexible	.788	.433	
Parties can influence the choice of procedures	.714		
Parties are able to choose arbitrator	.636		
Parties can agree to exclude appeals on an error of law	.440		
Parties have reasonable opportunity to deal with other parties case		.889	
Parties have reasonable opportunity to present their case		.876	
Decisions provide justice between the parties		.637	
The process is private		.431	
Appeals against awards is severely limited			.822
The award is binding			.812
The winning party gets their costs			.677

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

As can be seen from Table 6.10 component 1comprises: (i) procedures can be tailored to suit case; (ii) procedures of arbitration are flexible; (iii) parties can influence procedures chosen; (iv) parties are able to choose the arbitrator; and (v) parties can agree to exclude appeals on errors of law. These items deal with how

parties can influence or control matters of the arbitration and can therefore be expressed as: - **Features allowing the control of arbitration.**

Component 2 comprises: (i) reasonable opportunity to deal with other parties case; (ii) reasonable opportunity to present their case; (iii) decisions provide justice between the parties; and (iv) the process is private. These items generally deal with matters of justice and fairness and therefore can be expressed as: - **Features providing for a fair arbitration held in private.**

Component 3 comprises: (i) appeals against awards is severely limited; (ii) the award is binding; and (iii) the winning party gets their costs. These features can be expressed as: - **Features providing for certainty of the award and reimbursement of costs.**

As referred to in section 6.5.2, principal component analysis has been used to enable the factors to be expressed in a more simplistic way. Thus the components of features having a positive effect towards choosing arbitration can be summarised as a private process providing fairness, control of the process and an award that is final.

6.6.2.2 Determining components of negative features of arbitration from the combined data of Lawyers and Users

Taking the negative features referred to above in section 6.5.1.2 these were analysed to determine the various components and the different features that made up each component. Table 6.11 shows the components with their loading. As above, varimax rotation was used. Three factors had eigenvalues over Kaiser's criterion of 1 and between them explain 66.33% of the variance. The required standards were achieved with the determinant being .001, which is well above the minimum standard referred to previously. The Kaiser-Meyer-Olkin measure for sampling adequacy was .80 and is a very good value according to Hutcheson&

Sofroniou[303] and therefore acceptable. The Bartlett's test for sphericity was also applied with satisfactory result. Again, features that are included in more than one component and have a low loading are not duplicated and are used in only one component.

Table 6.11 PCA components for negative features of arbitration from the combined data of Lawyers and Users

Rotated Component Matrix[a]

	Component		
	1	2	3
Lawyers reluctant to depart from court style procedures	.822		
Lawyers prefer adversarial approach	.792		
It is too much like litigation	.789		
Lawyers' fees are a substantial part of overall costs	.729		
Complexity of procedures used	.637		
Too adversarial	.599		.477
Delays caused by arbitrator due to unavailability		.846	
Unavailability of first choice arbitrator	.425	.728	
Lack of confidence in arbitrators decisions		.648	
Delays caused by party advisers due to unavailability		.634	.530
The cost of arbitration			.813
Complexity of arbitration law			.604

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

As shown in Table 6.11, component 1 comprises; (i) lawyers reluctant to depart from court style procedures; (ii) lawyers prefer adversarial approach; (iii) it is too

[303] Hutcheson, G & Sefroniou, N (1999) op. cit. p.685

much like litigation; (iv) lawyers fees are a substantial part of overall costs; (v) complexity of procedures used; and (vi) too adversarial. These items encompass arbitration being complex and similar to court style proceedings. These items can therefore be express as:- **Features too close to litigation.**

Component 2 comprises: (i) delays caused by arbitrator due to unavailability; (ii) unavailability of first choice arbitrator: (iii) lack of confidence in arbitrators decisions; and (iv) delays caused by party advisers due to unavailability These components can be expressed as:- **Delay issues and lack of confidence in arbitrators' decisions.**

Component 3 comprises: (i) the cost of arbitration; and (ii) complexity of arbitration law. These components can be expressed as: - **Cost and complexity of arbitration law.**

The components of features of arbitration having a negative effect on the choice of arbitration can be summarised as those of cost and complexity, with procedures styled on litigation and subject to delay and confidence issues.

6.6.3 Lawyers' perspective of positive and negative features of arbitration

The perspective of lawyers in respect of those features that influence them positively or negatively, when considering using arbitration, have been determined (Tables 6.12 and 6.13 below). The means of the distributions for each feature have been calculated, together with the standard deviation and the p value for the t-test for significant difference between the measured and assumed mean of 4. Additionally the positive scores for categories (5+6+7) have been calculated as a percentage of the total scores for the feature, including neutral scores and similarly for the negative scores (1+2+3).

6.6.3.1 Positive features of arbitration from the perspective of Lawyers

The positive features are shown below in Table 6.12. There are 12 positive features and there is only one feature where the mean is not significantly different from the hypothetical mean and that is 'parties can agree to exclude appeals on a point of law' and can be considered as neutral. This is also the case for the result of the combined data. The most important positive features are; that the award is binding; the process is private; the parties able to choose the arbitrator and there is opportunity to deal with their own and the other parties case. Of low importance, although having a positive effect, are; the ability to tailor the process to suit the case; appeals against the award being severely limited and that decisions provide justice between the parties.

Table 6.12 Positive features of arbitration from the perspective of Lawyers

Lawyers- positive features	Score (5+6+7)	N	%	mean	SD	P value
1. the award is binding	40	51	78%	5.59	1.22	.000
2. the process is private	41	53	77%	5.57	1.25	.000
3. parties are able to choose the arbitrator	36	53	68%	5.13	1.27	.000
4. reasonable opportunity to deal with other parties case	36	53	68%	5.06	1.17	.000
5. reasonable opportunity to present their case	34	53	64%	5.04	1.19	.000
6. winning party get their costs	33	53	62%	4.89	1.20	.000
7. procedures of arbitration are flexible	30	52	58%	4.87	1.30	.000
8. parties can influence procedures chosen	31	53	58%	4.77	1.07	.000
9. procedures can be tailored to suit case	26	52	50%	4.65	1.30	.001
10.appeals against the award are severely limited	30	53	57%	4.51	1.71	.034
11.decisions provide justice between the parties	24	53	45%	4.49	1.55	.047
12.parties can agree to exclude appeals on errors of law	14	52	27%	**4.08**	**1.31**	**.909**

6.6.3.2 Negative features of arbitration from the perspective of Lawyers

With respect to the negative features only one feature has a mean that is not significantly different from the hypothetical mean of 4, this being 'complexity of arbitration law'. Feature 7 in Table 6.13 shows that 49%, almost a half, of Lawyer respondents consider that a negative effect on arbitration is that it is too much like litigation, which might not have been expected as lawyers are trained to litigate. This is discussed further with other findings in section 10.3.4 The most important negative features are; the cost of arbitration; lack of confidence in arbitrators' decisions; unavailability of the first choice arbitrator and delays due to the unavailability of party advisers and the arbitrator.

Table 6.13 Negative features of arbitration from the perspective of Lawyers

Lawyer- negative features	Score (1+2+3)	N	%	mean	SD	P value
1. the cost of arbitration	37	53	70%	2.77	1.42	.000
2. lack of confidence in arbitrators' decisions	32	51	63%	3.02	1.07	.000
3. first choice arbitrator often not available	29	50	58%	3.12	0.94	.000
4. delay, unavailability of party advisors	25	51	49%	3.18	0.95	.000
5. delays unavailability of the arbitrator	28	51	55%	3.24	0.99	.000
6. complexity of procedures used	24	52	46%	3.29	0.96	.000
7. it is too much like litigation	25	51	49%	3.37	1.04	.000
8. lawyers reluctant to depart from court style procedure	22	51	43%	3.45	1.14	.001
9. too adversarial	21	52	40%	3.50	1.09	.000
10. lawyers fees a substantial part of overall cost	20	51	39%	3.53	1.29	.012
11.lawyers prefer adversarial approach	21	51	41%	3.57	1.15	.014
12.complexity of arbitration law	20	51	39%	3.65	1.44	**.086**

6.6.4 Users' perspective of positive and negative features of arbitration

The same process has been used as in section 6.5.3. There was one extra question for User that was not on the Lawyer questionnaire and obviously the combined data did not include this question, which related to Lawyers being

confrontational at proceedings, which is referred to in the discussion chapter[304] . As previously, those features where there is no significant difference between the measured mean and the hypothetical mean of 4 are shown in bold.

6.6.4.1 Positive features of arbitration from the perspective of Users

There are 11 positive features for Users, shown in Table 6.14. The most important positive features for Users are; the opportunity to deal with their own and the other parties case; the award being binding; decisions provide justice between the parties and that procedures are private and flexible. The remaining five positive features have means not significantly different from the hypothetical mean of 4 and therefore can be considered as neutral. It appears, from the respondents' point of view, that the winning party getting their costs is less important than the above mentioned features.

Table 6.14 Positive features of arbitration from the perspective of Users

Users- positive features	Score (5+6+7)	N	%	mean	SD	P value
1 reasonable opportunity to present case	28	35	80%	5.34	1.31	.000
2 reasonable opportunity to deal with other parties case	25	35	71%	5.23	1.22	.000
3. the award is binding	27	35	77%	5.11	1.61	.000
4. decisions provide justice between the parties	18	35	51%	4.86	1.31	.000
5. the process is private	18	35	51%	4.83	1.45	.001
6. procedures of arbitration are flexible	20	35	57%	4.71	1.36	.009
7. procedures can be tailored to suit case	14	35	40%	4.51	1.44	**.074**
8. parties are able to choose the arbitrator	12	35	34%	4.49	1.52	**.051**
9. winning party get their costs	12	35	34%	4.34	1.45	**.172**
10. appeals against the award are severely limited	13	35	37%	4.20	1.81	**.432**
11. parties can influence procedures chosen	12	35	34%	4.20	1.32	**.493**

[304] Section 10.3.4

6.6.4.2 Negative features of arbitration from the perspective of Users

As is seen in Table 6.15 there are 14 negative features, however as previously explained, feature 14 (shown in italics) 'lawyers tend to be confrontational' was not included in the combined data. This feature has been included here to investigate the attitude of Users towards the confrontational style of litigation. As it has the third lowest mean, it is clearly a factor that influences parties (Users) in a negative way in choosing arbitration and is included in the discussion chapter[305]. The more important negative features, having regard to the size of the means are; complexity of procedures; lawyers' fees; being too much like litigation; the adversarial approach of Lawyers and Lawyers being reluctant to move from court style procedures. All of the negative features clearly detract from using arbitration, however, it is noticeable that from User respondents perspective, the cost of arbitration appears to have a less negative effect.

Table 6.15 Negative features of arbitration from the perspective of Users

Users' negative features	Score (1+2+3)	N	%	mean	SD	P value
1. complexity of procedures used	20	35	57%	3.26	1.50	.001
2. lawyers fees are a substantial part of overall cost	21	35	60%	3.29	1.99	.032
3. it is too much like litigation	18	34	53%	3.35	1.63	.007
4. lawyers prefer an adversarial approach	19	35	54%	3.37	1.70	.018
5. lawyers reluctant to depart from court style procedure	18	34	53%	3.38	1.72	.015
6. delay due to unavailability of party advisors	18	35	51%	3.40	1.33	.007
7. first choice arbitrator often not available	16	34	47%	3.44	1.38	.024
8. too adversarial	18	35	51%	3.46	1.56	.014
9. delays unavailability of the arbitrator	16	35	46%	3.51	1.27	.040
10. complexity of arbitration law	16	35	46%	3.54	1.46	**.092**
11. lack of confidence in arbitrators' decisions	13	35	37%	3.63	1.37	**.113**
12. the cost of arbitration	18	35	51%	3.74	2.06	**.400**
13. parties can agree to exclude appeals on	12	34	35%	3.97	1.82	**.696**

[305] Section 10.3.4

errors of law						
14. lawyers tend to be confrontational in proceedings	*18*	*35*	*51%*	*3.31*	*1.62*	*.020*

6.6.5 Comparing the perspectives of Lawyers and Users of positive and negative features of arbitration

This was achieved by considering the positive and negative features separately and forming tables (Tables 6.16 and 6.17) showing the mean and standard deviation of the distributions, together with the percentage scores in respect of the total number of scores, including the neutral score. This enables a comparison to be made between the results for Lawyers and Users.

6.6.5.1 Comparing common positive features of arbitration between the perspectives of Lawyers and Users

Table 6.16 shows the common positive features between Lawyers and Users. With respect to these common positive features there are four features, shown bold, that have high means and high percentages for both Lawyers and Users and are therefore considered as the more important features that influence the choice of arbitration for both Lawyers and Users. Having a binding award, being able to present their own and deal with the other party's case with flexible procedures are therefore the more important features for both Lawyers and Users.

Table 6.16 Common positive features of arbitration between Lawyers and Users

COMMON POSITIVE FEATURES Lawyer Q21and User Q19	Lawyers %	mean	SD	Users %	mean	SD
1. parties are able to choose the arbitrator	68	5.13	1.27	34	4.49	1.52
2. parties can influence procedures chosen	58	4.77	1.07	34	4.20	1.32
3. reasonable opportunity to present case	**64**	**5.04**	**1.19**	**80**	**5.34**	**1.31**
4. reasonable opportunity to deal with other	**68**	**5.06**	**1.17**	**71**	**5.23**	**1.22**

parties case						
5. procedures can be tailored to suit case	50	4.65	1.30	40	4.51	1.44
6. procedures of arbitration are flexible	**58**	**4.87**	**1.30**	**57**	**4.71**	**1.36**
7. the process is private	77	5.57	1.25	51	4.83	1.45
8. the award is binding	**78**	**5.59**	**1.22**	**77**	**5.11**	**1.61**
9. decisions provide justice between the parties	45	4.49	1.55	51	4.86	1.31
10. appeals against the award are severely limited	57	4.51	1.71	37	4.20	1.81
12. winning party get their costs	62	4.89	1.20	34	4.34	1.45

These four features could be described as the ability to deal with the case in a just manner. Dealing with the case in a just manner is different to the decision providing justice between the parties. With the former, it is that the proceedings are fair and just, whilst the latter relates to the actual decision reached by the arbitrator. It appears therefore that having fair and just proceedings to deal with the case is more important to both Lawyers and Users in deciding to use arbitration than the actual justice of the decision, which lies third from bottom in the above list in Table 6.16.

6.6.5.2 Comparing common negative features of arbitration between Lawyers and User

Those factors that are negative for Lawyers are also negative for Users, except for 'parties are able to exclude appeals on errors of law', which is positive for Lawyer and negative for User. With respect to negative features, these are shown in Table 6.17. There are no features where both Lawyer and User have a low mean and high percentage indicating an important common negative feature.

Table 6.17 Common negative features of arbitration between Lawyers and Users

COMMON NEGATIVE FEATURES Lawyer Q21and User Q19	Lawyer %	mean	SD	User %	mean	SD
1. first choice arbitrator often not available	58	3.12	0.94	47	3.44	1.38

2. delays unavailability of the arbitrator	55	3.24	0.99	46	3.51	1.27
3. lack of confidence in arbitrators' decisions	63	3.02	1.07	37	3.63	1.37
4. delay due to unavailability of party advisors	49	3.18	0.95	51	3.40	1.33
5. lawyers reluctant to depart from court style procedure	43	3.45	1.14	53	3.38	1.72
6. lawyers prefer adversarial approach	41	3.57	1.15	54	3.37	1.70
7. lawyers' fees are a substantial part of overall cost	39	3.53	1.29	60	3.29	1.99
8. it is too much like litigation	49	3.37	1.04	53	3.35	1.63
9. complexity of arbitration law	39	3.65	1.44	46	3.54	1.46
10. too adversarial	40	3.50	1.09	51	3.46	1.56
11. complexity of procedures used	46	3.29	1.42	57	3.26	1.50
12. the cost of arbitration	70	2.77	2.77	51	3.74	2.06

This is largely due to the fact that the order of importance of the rating of negative features by Lawyers is almost the reverse for many features for Users. For example, the cost of arbitration is the most important negative feature for Lawyers, but second from bottom for Users. The features of negative influences for Lawyers are the cost of arbitration, lack of confidence in arbitrators' decisions and unavailability issues, whereas for Users it is the complexity of procedures, lawyers' fees and features reflective of litigation.

6.6.6 Mann-Whitney Test for Lawyers and Users distributions

A Mann-Whitney test was undertaken to determine whether there were any significant differences in the ranked distributions between the data for Lawyers and data for Users for each of the different features of arbitration referred to in the questionnaire that are common to both. Table 6.18 shows the features where there is a significant difference in the ranked distributions between Lawyers and Users.

Table 6.18 Features of arbitration having a significant difference between Lawyers and Users

Feature	Results Mann-Whitney test
Parties are able to choose the arbitrator (positive feature)	U= 673.5, z= -2.227 and p= .026
Parties can influence the choice of procedures (positive feature)	U=688.00, z= -2.127 and p= .034
The process is private (positive feature)	U= 649.00, z= -2.434 and p= .015
The winning party gets their costs (positive feature)	U= 692.00, z= -2.083 and p= .037
Lack of confidence in arbitrators' decisions (negative feature)	U= 1142.00, z= 2.278 and p= .023
The cost of arbitration (negative feature)	U= 1171.00, z= 2.122 and p= .034

There are therefore only six features where there is a significant difference in the ranked distributions between Lawyer and User, therefore there are 75% of the features where there is no significant difference. This indicates that whilst there are differences between Lawyers' data and Users' data, for a large majority of the features, there is no significant difference in the ranked distributions.

6.6.7 Findings for features having a positive or negative effect on the choice of arbitration

These findings answer the second part of research question one. Both categories of respondents largely hold the same view of what features have a positive or negative effect on deciding to choose arbitration, although there are variations between the two categories of respondents as to the strength of opinion for the various features. The Man-Whitney test showed that for 75% of the features there was no significant difference between the rank scores of Lawyers and Users, indicating that there is much common ground between Lawyers and Users. The positive features, using the combined data of Lawyers and Users, influencing the

choice of arbitration are shown in Table 6.8. The most influential positive features are; having a binding award in a private arena; allowing reasonable opportunity for a party to present their case and deal with that of their opponent. Being able to choose the arbitrator, having flexible procedures, with the winning party receiving their costs are also important positive features. Of lesser importance is the justice that is provided between the parties; that the procedures can be tailored to suit the case; the parties can influence procedures and successful appeals are difficult to achieve.

The features, using the combined data, with a negative influence on choosing arbitration are shown in Table 6.9. The cost of arbitration is the most influential negative feature. Lack of confidence in Arbitrators' decisions; delays due to party advisers and arbitrators; complexity of procedures; the first choice arbitrator being unavailable and being too much like litigation are also influential negative features. Of slightly less importance are lawyers' fees; features that relate to litigation and the complexity of arbitration law. Principal component analysis summarises the negative features as 'being too close to litigation with a lack of confidence in arbitrators' decisions, delay issues, with a process that is costly and complex.

Whilst factors having a positive effect on choosing arbitration are of importance, it is perhaps the features having a negative effect on choosing arbitration that require further consideration. As this involves other research areas for some of these negative features, it is discussed in more detail in section 10.3.

6.7 DISCUSSION OF RESULTS

With respect to the use of arbitration, this has been shown to have been in significant decline for the ten year period preceding the data collection. The degree of decline however reduced as the size of the arbitration increased. The trend indicates a slowdown of the decline. There has been anecdotal evidence of decline in using arbitration and Reynolds[306] used data from CIArb, ARIBA, ICE

[306] Reynolds, M. (2014) An overview of the use of arbitration in England. Centre for Socio-Legal Studies;

and the RICS, which generally showed decline. Reynolds however considered that decline in arbitration had “bottomed out”. Reynolds referred to arbitration generally for this conclusion, as opposed to only construction arbitration. Black and Fenn obtained data from institutions regarding the number of arbitration appointments. Whilst there was a suggestion of declining numbers, they reported that due to incomplete records or inadequate detail, analysis was not possible. This thesis considers only construction arbitration. The empirical nature of this research differs from that of Reynolds and the source of the data is different. Further, this research does not suggest that decline in construction arbitration has halted, but that decline is reducing. This is therefore new evidence of the use and trend of construction arbitration.

With respect to the factors that influence respondents towards or away from selecting arbitration as their dispute resolution mechanism, these are crystallised in the summaries derived from principal component analysis. This does not give the order of importance of features, but describes the components that correlate together. With respect to positive factors these can be summarised as ‘a private, controllable process, providing a fair resolution that has a binding award’. With respect to negative features ‘being too close to litigation with a lack of confidence in arbitrators’ decisions, delay issues, with a process that is costly and complex’. The positive and negative features were derived from empirical data, sourced from Lawyer advisers and Users (parties). Brooker used empirical data to determine that duration, cost and adversarial approach were negative influences on arbitration, with data from main and sub-contractors. Reynolds concluded the same features as Brooker, with the addition of ‘a lack of quality and skill’, with Reynolds’s data being by interview with arbitrators. Whilst Reynolds and Brooker refer to negative features, this research identifies both negative and positive factors influencing the choice of arbitration. In addition to those negative features identified by Brooker and Reynolds, this research indicates that delays caused by non-availability of both arbitrators and lawyers have a negative effect on choosing arbitration. Additionally, complexity of procedures emerged as a negative issue,

Oxford University. Also see section 3.4.1

although it did not appear to be a problem when consideration in section 3.2.3. Further the likely unavailability of the preferred arbitrator is also considered by respondents to influence them in a negative way. This research brings new knowledge in that it extends, considerably, the understanding of the influence of various features of arbitration on parties and their lawyer advisers when considering arbitration as their dispute resolving method.

6.8 SUMMARY OF CHAPTER

This chapter has investigated the extent of the use of construction arbitration and the trend of its use. Additionally the features influencing parties and their lawyer advisers towards or away from using arbitration have been identified. This leads to the next chapter dealing with those matters influencing the effectiveness of the arbitral process.

CHAPTER 7 FACTORS INFLUENCING THE EFFECTIVE RUNNING OF ARBITRATION

7.1 INTRODUCTION

In the last chapter the extent of the use of construction arbitration was investigated, together with the trend in its use. Additionally consideration was given to the factors that influenced Lawyers and Users away and towards selecting arbitration as the method of resolving construction disputes. This chapter extends the understanding of the use of arbitration by considering the perception and opinions of respondents of the factors that influence the effective running of the arbitral process. From the perspective of this thesis, to be effective, the process needs to be fair and efficient, producing the desired result, including the final outcome of the award. To this end a bank of questions was produced on factors that have a bearing on how arbitration is conducted. These questions not only determined how respondents viewed the effectiveness of each feature, but also determined respondents' perception of features that have a potential influence on duration and cost. Further, there are other matters that influence the effectiveness of arbitration and its use and these are also considered. For example, the extent arbitrators consult with party representatives and party representatives with their clients regarding implementing efficient and effective procedures. What cost and time saving reviews are made to improve the arbitral process. In addition, whilst running an effective arbitration is very important, it is also important to determine whether there are factors that, although they might extend cost and/or the duration of arbitration, are more important in the overall assessment of procedures and influences effectiveness for those involved with arbitration. These lead to Research Question 2, which states "*how important are those features influencing the effective running of arbitration*".

7.2 STATISTICAL METHODS USED IN THIS CHAPTER

The following tests have been used in this chapter. As in the previous chapter, the reasons for their use will be shown at the point of use.

One sample t test

Kruskal-Wallis

Chi-squared

7.3 FACTORS CONTRIBUTING TO EFFECTIVE RUNNING OF ARBITRATION

In order to answer Research Question 2, all three categories of respondents, Arbitrators, Lawyers and Users, were asked to rate between 'no importance' to 'extremely important', various features (procedures), that have an influence on the effective running of arbitration. Again a seven point scale was used with one representing 'no importance' at one end of the scale, with seven representing 'extremely important'. All points on the scale are measurements of importance, however, category 4 is taken as a neutral/transition point. A similar process was repeated as above for Research Question 1. The same questions were included in all three questionnaires, thereby allowing tests to determine whether there is any significant difference between their responses. The primary reasons for these investigations were to determine the level of importance to the respondents of each feature influencing the effective running of arbitration and any differences between the views of Arbitrator respondents and those of Lawyer/User respondents. The extent of any differences might be considered a reason, or reasons, why arbitration is in decline. That is to say, if Arbitrators, who are given the task of adopting procedures suitable to the case to avoid unnecessary delay or expense[307], have significant, conflicting opinions to those of Users and Lawyers, as to the importance of the features influencing the arbitral process, then Users and Lawyers may avoid such conflict by not choosing arbitration. Further, if there is discord over several areas of the process, this can influence the effectiveness and efficiency of the process. In addition, correlation tests were carried out to determine relationships.

[307] AA s. 33(1)(b)

7.3.1 Overall opinion of the importance of features for the effective running of arbitration

The distributions for the three categories of respondents have been combined to provide an overall opinion. Table 7.1 shows the means of the distributions for each of the features and are listed in order of the size of the mean. There is only one negative result, which is shown in italics and at the bottom of the list, this being 'the use of procedure based on litigation', the remainder are all positive. The p values are the significance values using the 'one sample t test' to determine those features where there is no significant difference between the measured mean and the hypothetical mean of 4. The features 'limiting the number of witnesses of fact', and 'limiting the amount of time given to a party to present their case at a hearing' have means that are not significantly different from the hypothetical mean of 4 and therefore can be considered as neutral. That is they can be considered as neither of no importance, nor of the upmost importance and are shown bold in the list below.

Table 7.1 Overall opinions of features for the effective running of arbitration

COMBINED - LAWYERS Q29, USERS Q27 and ARBITRATORS Q20	**mean**	**SD**	**p value**
1. the overall control of costs	5.60	1.32	.000
2. the overall control of time	5.60	1.20	.000
3. complying with time limits of arbitrators orders	5.60	1.30	.000
4. costs going to the winning party	5.41	1.20	.000
5. submitting a detailed claim early in the proceedings	5.40	1.30	.000
6. winning party not getting all of their costs if they have acted unreasonably during the arbitration	5.38	1.31	.000
7. keeping costs proportional to the claim	5.26	1.47	.000
8. the use of expedited methods	5.02	1.42	.000
9. early determination of issues	5.00	1.36	.000
10. early submission of how the claim is to be proven	4.99	1.33	.000
11. winning party not getting cost for issues lost	4.77	1.36	.000

12. limiting the amount of costs that a party can recover	4.74	1.59	.000
13. early submission of the law to be relied upon	4.68	1.47	.000
14. limiting the amount of documents to be disclosed	4.58	1.50	.000
15. limiting the number of expert witnesses	4.54	1.51	.000
16. the use of procedures that depart from litigation	4.32	1.42	.013
17. limiting the amount of time given to a party to present their case at a hearing	**4.18**	**1.47**	**.168**
18. limiting the number of witnesses of fact	**4.08**	**1.56**	**.570**
19. the use of procedures based on litigation	*3.63*	1.50	.007

Considering that the size of the mean is representative of the importance that is placed upon a feature for the effective running of arbitration, the ten features with the largest means, all have means close to, or above, 5 and are shown below:-

1. the overall control of costs
2. the overall control of time
3. complying with time limits of arbitrators orders
4. costs going to the winning party
5. submitting a detailed claim early in the proceedings
6. winning party not getting all of their costs if they have acted unreasonably during the arbitration
7. keeping costs proportional to the claim
8. the use of expedited methods
9. early determination of issues
10. early submission of how the claim is to be proven

The above ten features are considered by the combined respondents as the most important for an effective arbitration. It would therefore be expected that when considering the procedures for running arbitration, these features would be of high priority. The overall control of cost, time and complying with time limits in arbitrators' orders are the most important features and dealt with in more detail in

section 10.5 as it involves several different parts of the research. Those features requiring action to be taken early are an integral part of controlling cost and considered by respondents as important in the effective running of arbitration. Submitting a detailed claim, rather than a mere general indication of what is to be claimed, may reduce time and hence costs. Where only an outline of what is claimed is submitted, there will almost certainly be several exchanges before the claim is crystallised, likely resulting in time wasting and additional cost. If the detailed claim and any counterclaim is known early, including how the claim is to be proven, then there can be early determination of issues, which has the possibility of resolving the claim, or at worst allowing the claim to progress expeditiously. It is considered important by respondents that the winning party should get their costs. It is also considered important that a party who acts unreasonably should be penalised and that the whole of the arbitration costs should be proportional to the value of the claim. This does help both claimant and defendant to focus on what it is that they claim or defend and how they conduct themselves in the pursuit of their claim or defence of the claim. Using expedited methods is also important and also reflects on time and cost. As most of these features are recognised by all respondents as important for effectively running arbitration, then they should be readily implemented into the arbitral procedures. However there are several features in the above list (Table 7.1) that are not considered so important by individual categories of respondent.

The features of lower importance probably require more scrutiny as they are likely to receive less consideration in running the arbitration. This is not to say that such features are not considered at all. As referred to above, overall, the control of time and cost are two of the most important features. Further, when considering the individual categories of respondent (Table 7.2), controlling duration and cost retain their importance. It would therefore be expected that all features that have an influence on duration and cost would have relatively high means. Features that limit a particular aspect of arbitration, such as limiting the amount of documentation that a party can request from the other party, limiting the amount of costs that a party can recover and limiting the amount of time that a party has to present their case at a hearing, all have low means. It is however the individual

categories of respondent that provides better understanding as to why arbitration remains costly and time consuming and this is dealt with in the next section.

7.3.2 The individual perspectives of Arbitrators, Lawyers and Users of features for the effective running of arbitration

To obtain these opinions the data from the questionnaires for Lawyers, Users and Arbitrators were evaluated separately. Table 7.2 shows the means, standard deviation and the significance value between the measured mean and hypothetical mean of 4 for the individual categories of Lawyers, Users and Arbitrators. Positive means have an asterisk, negative means are in italics and significance values where p> .05 are in bold. Where the features themselves are in bold (left hand column), this is in the circumstances that each category of respondent has p> .05.

Table 7.2 Individual perspective of Lawyers, Users & Arbitrators of features for the effective running of arbitration

Individual results of means ,standard deviation and p values of features for Lawyer Q29, User Q27 and Arbitrator Q20	**LAWYER Q29**			**USER Q27**			**ARBITRATOR Q20**		
Features of arbitration	mean	SD	p value	mean	SD	p value	mean	SD	p value
the overall control of costs	5.28*	1.25	.000	5.67*	1.28	.000	6.00*	1.39	.000
keeping costs proportional to the claim	5.55*	1.17	.000	5.90*	1.14	.000	4.11*	1.57	**.669**
limiting the amount of costs that a party can recover	4.19*	1.27	**.285**	4.54*	1.71	**.057**	5.80*	1.37	.000
costs going to the winning party	5.57*	0.96	.000	4.97*	1.41	.000	5.66*	1.19	.000
winning party not getting cost for issues lost	4.70*	0.99	.000	4.59*	1.68	.035	5.09*	1.42	.000
winning party not getting all of their costs if they have acted unreasonably during the arbitration	5.09*	1.05	.000	5.33*	1.49	.000	5.89*	1.32	.000
the overall control of time	5.38*	1.13	.000	5.62*	1.39	.000	5.91*	1.01	.000
limiting the amount of documents to be disclosed	4.40*	1.17	.017	4.62*	1.74	.033	4.83*	1.67	.006

limiting the number of expert witnesses	4.09*	1.29	**.597**	4.85*	1.66	.003	4.86*	1.50	.002
limiting the number of witnesses of fact	*3.96*	1.34	**.839**	4.46*	1.73	**.104**	*3.83*	1.62	**.535**
limiting the amount of time given to a party to present their case at a hearing	4.02*	1.31	**.917**	4.28*	1.64	**.289**	4.31*	1.53	**.233**
submitting a detailed claim early in the proceedings	5.06*	1.35	.000	5.63*	1.26	.000	5.66*	1.19	.000
early submission of how the claim is to be proven	4.64*	1.30	.001	5.58*	1.03	.000	4.89*	1.47	.001
early submission of the law to be relied upon	4.09*	1.46	**.640**	5.55*	1.11	.000	4.63*	1.40	.012
complying with time limits of arbitrators orders	5.00*	1.36	.000	6.00*	1.04	.000	6.09*	1.12	.000
the use of expedited methods	4.51*	1.37	.009	4.87*	1.46	.001	5.97*	0.95	.000
the use of procedures based on litigation	*3.89*	1.40	**.557**	*3.63*	1.53	**.147**	*3.26*	1.56	.008
the use of procedures that depart from litigation	*3.91*	1.29	**.597**	4.26*	1.41	**.257**	5.00*	1.39	.000
early determination of issues	4.51*	1.51	.018	5.13*	1.17	.001	5.60*	1.04	.000

Whilst it is convenient to scan across the results in Table 7.2 for each feature, it is not easy to determine where that feature lies in the order of the size of its mean to give an instant assessment of the variation between Lawyers, Users and Arbitrators for a particular feature. Table 7.3 shows the features, together with the ranking of features in respect of the size of its mean. The overall result, combining all three categories of respondent, is also shown in Table 7.3 to enable an easy assessment of the overall result compared to the individual results.

The difference between respondents is evident for the feature, keeping cost proportional to the claim, where the mean of the distribution for Arbitrators is 4.11, whilst 5.55 for Lawyers and 4.89 for Users. Arbitrators appear to consider this feature of low importance and therefore it was pursued to a greater extent in the

interview stage and is dealt with in section 9.3.3. Keeping costs proportional to the claim is an important matter as clearly incurring costs that are much greater than the claim itself is far from ideal. This may be problematic with small claims, as a process has to be gone through, irrespective of the amount of claim. With respect to the use of expedited methods, early determination of issues, and early submission of how the claim is to be proven, although in the top ten most important features, Lawyers have relatively low means of 4.51, 4.51 and 4.64. These features have a larger, overall, mean due to either or both Arbitrators and Users having higher means. Therefore, in effect, Lawyers consider these features of lower importance. They all however have the potential of reducing duration and costs

Limiting the number of witnesses of fact has virtually a neutral mean for Lawyers at 3.96 and not particularly high for User at 4.46. Whilst it would not be expected that limitations would be applied in a case where different witnesses of fact have different facts to present, however where there are different witnesses that provide virtually the same facts as one another, this can consume time without any practical benefit to the arbitration. A similar comment applies to limiting the number of expert witnesses and whilst the Users' mean of 4.85 is not dramatically low, the mean of 4.09 for Lawyers is low. Limiting the amount of time for parties to present their cases at a hearing can be very beneficial in as much that it restricts presentations that are big on word count, but small on substance. Further, any time limits would have regard to submissions by the parties to the arbitrator and should allow a reasonable opportunity to deal with the case and not impede justice. This feature has a mean of only 4.02 for Lawyers and 4.28 for Users. Limiting the amount of costs that a party can recovers has a mean for Lawyers of 4.19 and for Users 4.54. Limiting recoverable costs can be an important method of controlling costs in some circumstances, as it not only influences parties against pursuing issues where there is little chance of success, it also influences them against spending a great deal of time on issues that they might lose. Further it is of some help in the situation where parties are of unequal standing. For example, a party with no monetary problems can, by delaying or pursuing unmeritorious claims, result in the less wealthy party, who having a good claim or defence,

having to agree to terms that otherwise they would not agree to, other than for the possibility of being subject to excessive costs should they lose. Using procedures that depart from litigation has a mean of 3.91 for Lawyers and 4.26 for Users. Departing from litigation style procedures is therefore not very important to Lawyers and only marginally more important for Users. With respect to litigation, whilst the current trend in the courts is for better management in controlling time and costs, it is doubtful that Arbitrators would be recognised by Lawyers as having the same authority as a Judge. As one interviewee stated in a passing remark, "if a Judge refused to agree to a particular request, even if the lawyer did not like it, they would likely accept the ruling, but if the same circumstances occurred with an arbitrator, then the lawyer is likely to shout injustice". It is quite possible for arbitration to follow general court style procedures, however restrictions of procedures imposed by Arbitrators would need to be readily accepted by Lawyers and not considered as a restriction of rights, as referred to by an interviewee[308]. Almost all Institutions have expedited procedures. The mean of the scores for expedited methods is 4.51 for Lawyers, which is not a level indicating much importance, although the mean for Users of 4.87 is not overly low. There appears, according to some interviewees, to be an attitude from lawyers that their rights are restricted if using expedited methods[309]. The limitation of documents is a feature that provides a restriction on the amount of documentation that a party has to provide to the other party and can be onerous if unfettered. The means of 4.40 and 4.62 for Lawyers and Users respectively, is indicative that this feature is also of relatively low importance. Early submission of the law on which a party relies in pursuit of their claim has a mean of only 4.09 for Lawyers. This is an important matter, for if the interpretation of some legal element is fundamental to the success of a claim, then the sooner the situation is brought to light, the better for the running of the arbitration.

There are therefore a number of features both Lawyers and Users attach a lower level of importance. These features do have a considerable influence on the time and cost expended in arbitrating, however they are generally restrictive and it

[308] Table 8.9
[309] Table 8.2

appears from this study that Lawyers in particular prefer not to be restricted by these features. There may also be a problem in that parties having been in dispute over a long period of time take the view that they are not going to concede anything, no matter what the cost. As referred to previously the DAC advised that arbitration should provide for a reasonable opportunity for parties to present their case, however, the indications from the above, suggests that Users and particularly their Lawyer advisers may not be prepared to take the steps to reduce the time and cost of arbitration. This is discussed further in section 10.5.

Table 7.3 Ranking of importance of features for the effective running of arbitration

POSITION IN RESPECT OF SIZE OF MEAN FOR LAWYER Q29,USER Q27 and LAWYER Q20 FOR EACH OF THE FEATURES	User	Lawyer	Arbitrator	Overall
complying with time limits of arbitrators orders	1st	7th	1st	3rd
keeping costs proportional to the claim	2nd	2nd	17th	7th
the overall control of costs	3rd	4th	2nd	1st
submitting a detailed claim early in the proceedings	4th	6th	8th	5th
the overall control of time	5th	3rd	4th	2nd
early submission of how the claim is to be proven	6th	9th	12th	10th
early submission of the law to be relied upon	7th	15th	15th	13th
winning party not getting all of their costs if they have acted unreasonably during the arbitration	8th	5th	5th	6th
early determination of issues	9th	11th	9th	9th
costs going to the winning party	10th	1st	7th	4th
the use of expedited methods	11th	10th	3rd	8th
limiting the number of expert witnesses	12th	14th	13th	15th
limiting the amount of documents to be disclosed	13th	12th	14th	14th
winning party not getting cost for issues lost	14th	8th	10th	11th
limiting the amount of costs that a party can recover	15th	13th	6th	12th
limiting the number of witnesses of fact	16th	17th	18th	18th
limiting the amount of time given to a party to present their case at a hearing	17th	16th	16th	17th
the use of procedures that depart from litigation	18th	18th	11th	16th
the use of procedures based on litigation	19th	19th	19th	19th

7.3.3 Differences between the perspectives of Arbitrators, Lawyers and Users

As is evident from Table 7.3, there are differences between the positions held between Arbitrators, Lawyers and Users for the different features of arbitration. The important matter however is whether there are any significant differences. This has been explored by using the Kruskal-Wallis test as there are three independent categories of respondents; Lawyers, Users and Arbitrators. The test included all features and Table 7.4 shows each feature and the initial result of the test, together with the follow up analysis which may adjust the significance values. Where the initial result has a significance value of $p \leq .05$, the individual significance values of each of the category combinations, that is Arbitrator-Lawyer, Arbitrator-User and Lawyer-User can be viewed on the follow up analysis on SPSS and the adjusted significant values extracted. In the initial result for significance, features having $p > .05$ are listed as insignificant in Table 7.4, as there is no follow up procedure. Where there is a significant difference, the significance values are show bold in Table 7.4.

Table 7.4 Kruskal-Wallis results for features contributing to effective running of arbitration

Features of arbitration - Kruskal-Wallis test Lawyer Q29, User Q27, Arbitrator Q20	Result	Follow up analysis		
		Adjusted signif. **Arbitrator-Lawyer**	Adjusted signif. **Arbitrator-User**	Adjusted signif. **Lawyer-User**
the overall control of costs	H= 10.175, p= .006	**.005**	.427	.297
keeping costs proportional to the claim	H= 27.569, p= .000	**.000**	**.000**	.550
limiting the amount of costs that a party can recover	H= 28.243, p= .000	**.000**	**.001**	.383
costs going to the winning party	H= 6.175, p= .046	1.000	.081	.101
winning party not getting cost for issues lost	H= 1.907, p= .385	Not signif	Not signif.	Not signif.
winning party not getting all of their costs if they have acted unreasonably during the arbitration	H= 12.193, p= .002	**.001**	.161	.427
the overall control of time	H= 4.485, p= .106	Not signif	Not signif.	Not signif.

limiting the amount of documents to be disclosed	H= 3.497, p= .174	Not signif	Not signif.	Not signif.
limiting the number of expert witnesses	H= 8.735, p= .013	**.048**	1.000	**.032**
limiting the number of witnesses of fact	H= 3.684, p= .159	Not signif	Not signif.	Not signif.
limiting the amount of time given to a party to present their case at a hearing	H= 1.538, p= .464	Not signif	Not signif.	Not signif.
submitting a detailed claim early in the proceedings	H= 6.163, p= .046	.134	1.000	.094
early submission of how the claim is to be proven	H= 10.904, p= .004	1.000	.098	**.003**
early submission of the law to be relied upon	H= 21.487, p= .000	.332	**.020**	**.000**
complying with time limits of arbitrators orders	H= 19.008, p= .000	**.000**	1.000	**.002**
the use of expedited methods	H= 24.779, p= .000	**.000**	**.002**	.698
the use of procedures based on litigation	H= 3.214, p= .200	Not signif	Not signif.	Not signif.
the use of procedures that depart from litigation	H= 13.028, p= .001	**.001**	.057	.825
early determination of issues	H= 13.177, p= .001	**.001**	.279	.196

The important significant differences of features of arbitration for this study are those between Arbitrators and Lawyers and Arbitrators and Users. This is because Users and Lawyers are the ones that actually choose whether to use arbitration and it is important to determine to what degree the views of Arbitrators correspond to the views of Lawyers and Users. It is also arguable that significant differences of opinion relating to the procedural elements of the process can have an impact on the efficiency and effectiveness of the process. This is not to say that differences of opinion on procedural matters are bound to cause conflict, but that it is a possibility. Arbitrators have a mandatory duty when considering procedures to be used, parties and their advisers have a different agenda, they wish to win their case, whatever the procedures. Interview data from both Arbitrators and Lawyers[310] indicates that winning overrides most other matters and reduction in procedures is seen as compromising a party's position. Further, the DAC in their

[310] Tables 9.2, 9.3, 9.8 and 9.9

recommendations for the AA foresaw the possibility of conflict between arbitrators and parties, this being due to the duties placed on arbitrators and party autonomy given to the parties[311]. It is therefore possible that if there is substantial disagreement between arbitrators and parties/advisors in getting to the final procedural mode, this may involve further submissions by party advisors and even additional interlocutory meetings to finally agree procedures. These matters therefore have an influence on the overall efficiency and therefore effectiveness of the conduct of arbitration. The salient point is that this is more likely to occur with features where there is a significant difference of opinion relating to the importance of those features. Further, the more such features there are, the greater the chance of duration and cost being incurred in coming to an agreement.

There are nine features of arbitration where there is a significant difference in the ranked distributions between Arbitrators and Lawyers, as shown in Table 7.5.

Table 7.5 Features with a significant differences between Arbitrators and Lawyers for effective running of arbitration

Features where there is a significant difference in the ranked distributions between Arbitrator and Lawyer		Arbitrator		Lawyer	
	p value	mean	Position*	mean	Position*
the overall control of costs	.005	6.00	2nd	5.28	4th
keeping costs proportional to the claim	.000	4.11	17th	5.55	2nd
limiting the amount of costs that a party can recover	.000	5.80	6th	4.19	13th
winning party not getting all of their costs if they have acted unreasonably during the arbitration	**.001**	**5.89**	**5th**	**5.09**	**5th**
limiting the number of expert witnesses	.048	4.86	13th	4.09	14th
complying with time limits of arbitrators orders	.000	6.09	1st	5.00	7th
the use of expedited methods	.000	5.97	3rd	4.51	10th
the use of procedures that depart from litigation	.001	5.00	11th	3.91	18th

[311] DAC Para. 159

early determination of issues	.001	5.60	9th	4.51	11th

*position is in respect to position on the list of features determined by size of mean

With respect to the feature 'winning party not getting all of their costs if acted unreasonably during the arbitration' is fifth in order of ranking of importance by the size of their means (Table 7.3) for the distributions for both Arbitrators and Lawyers and shown bold in Table 7.5. It can therefore be said that although there is a significant difference in their distributions, from a practical point of view there is no difference between the two views of Arbitrators and Lawyers for that feature.

With respect to Users, there are four features where there is a significant difference between the ranked distribution for Arbitrators and Users as shown in Table 7.6. None of these features are ranked in the same position of importance for both Arbitrators and Users, hence all four features have a practical significant difference.

Table 7.6 Features with a significant differences between Arbitrators & Users for effective running of arbitration

Features where there is a significant difference in the ranked distributions between Arbitrator and Use		Arbitrator		User	
	p value	mean	Position*	mean	Position*
keeping costs proportional to the claim	.000	4.11	17th	5.90	2nd
limiting the amount of costs that a party can recover	.001	5.80	6th	4.54	15th
early submission of the law to be relied upon	.020	4.63	15th	5.55	7th
the use of expedited methods	.002	5.97	3rd	4.87	11th

*position is in respect to position on the list of features determined by size of mean

Having regard to the above, as three of the features of Users are the same as for Lawyers, there are nine different features where there is a significant difference in the distribution between Arbitrators and Lawyers or Users. These are:-

1. the overall control of costs
2. keeping costs proportional to the claim

3. limiting the amount of costs that a party can recover
4. limiting the number of expert witnesses
5. complying with time limits of arbitrators orders
6. the use of expedited methods
7. the use of procedures that depart from litigation
8. early determination of issues
9. early submission of the law to be relied upon

There are 9 out of 19 features where there is a significant difference in the distribution of the importance of these features between Arbitrators and either Lawyers or Users. There is therefore a greater chance with these 9 features of there being more difficulty in reaching agreement, with an effect on efficiency and effectiveness of the procedural process.

7.3.4 Findings on features of arbitration for the effective running of arbitration

In the first instance the data of the three categories of respondent was combined to give an overall opinion of the relative importance to the various factors that govern the running of arbitration. It is the overall opinion of respondents that is taken to answer Research Question 2. Whilst all of the means of the different factors are measures of importance, the scale used did allow an assumed neutral/transition at category 4. On this basis there was only one negative feature, this being the use of procedures based on litigation. This does indicate that the respondents consider that basing arbitral proceedings on litigation is the least important feature. This is however contradicted in interview data, where interviewees suggest that procedures move towards court style procedures[312]. Table 7.1 lists the importance of each feature, from an overall point of view, based on the level of the means of their distributions. There are 10 features that have their mean close to or above 5 and on the basis of the size of the mean, might be considered as the more important factors for the effective running of arbitration and are listed immediately below Table 7.1.

[312] Tables 9.2 and 9.8

Clearly, providing a list of 19 features, some will take a higher order than others in respect of the size of their means. It was however noticeable that either Lawyers, Users or both had relatively low means on the remaining features. These features of procedure are restrictive in nature and have an impact on cost and duration of the arbitral process. As controlling cost and duration were rated as the two most important features for an effective arbitration, it would be expected that the remaining features would have had larger means from Lawyers and Users than they actually received. This study therefore infers that Users and Lawyers in particular prefer not to choose procedures that restrict their actions, or limit what they might receive monetary wise in the award. Users and particularly Lawyers will, most likely, be less inclined to adopt a number of procedures that would help reduce the duration and cost of arbitration. As arbitrators have a mandatory duty to avoid unnecessary delay and expense, there could be difficulty in agreeing procedures that are restrictive, which may affect the efficiency and effectiveness of arbitration.

There are significant differences in the distributions between Arbitrators and either Lawyers or Users for nine of the features. This indicates that the opinions of Arbitrators as to the importance of these features are significantly different to those of either Lawyers or Users. Similar arguments exist for this situation as were argued over low means by Lawyers and User a few paragraphs ago. That is, there may be some difficulty in reaching agreement as to how to deal with those procedures. However, seven of the features of significant difference are also in the features where there are low means. The important point derived from comparing the distributions between Arbitrators and Lawyers/Users, is that there are two further features, in addition to those relating to relatively low means, where there may be some difficulty agreeing the procedures to be used. This makes 13 out of 19 features were there may be difficulty in implementation of the procedures to be used. It is highly likely that this situation will have an effect on both the use and the effectiveness of arbitration.

7.4 INVOLVEMENT OF LAWYERS AND USERS IN CHOOSING ARBITRAL PROCEDURES

The cooperation between Arbitrators and Lawyers and Lawyers and their clients (Users) and how they interact in producing the procedures for conducting arbitration are integral for the effectiveness, or otherwise of arbitration. It is therefore logical that data relating to these matters are an integral part of Research Question 2. It is for the Arbitrator to adopt suitable procedures for the particular case, however, due to party autonomy, the parties have a right to be involved in choosing those procedures should they wish to do so. Further, if the parties agree a particular matter between themselves, they override the Arbitrator should he disagree with that proposal. The scale used to measure involvement levels is a seven-point scale with 1= rarely and 7= always. Whilst all points on the scale are measurements of involvement in choosing arbitral procedures, category 4 can be taken as the transition point between the lower involvement of categories (1+2+3) and higher involvement of categories (5+6+7)

7.4.1 Involvement of Lawyers in deciding arbitral procedures from the perspective of Lawyers and Arbitrators.

Lawyers were asked their perception of the extent Arbitrators involved them in deciding procedures to be used and a similar question to Arbitrators asking to what extent they involved Lawyers. With respect to the responses from Arbitrators, the median of the distribution is in category 7.0, indicating that Arbitrator respondents consider that they involve Lawyers to a high degree. Considering the responses around the transition category of 4, those Arbitrators considering low involvement, that is categories (1+2+3) is 0, whilst those of higher involvement, categories (5+6+7), are 31. Using chi-square to test for significant difference between the two figures, on the assumption that the expected responses would be equal, χ^2= 29.032, which is considerably larger than the critical value for χ^2 at $p< .001$ which is 10.827. Therefore, there are significant more arbitrator respondents who consider higher involvement compared to those of lower involvement, beyond $p< .001$. With respect to responses by Lawyers, the median is 6.0, which also indicates high involvement. The frequency for lower involvement is 6, whilst for

higher involvement is 38, with chi-squared being χ^2= 21.841. Therefore, there are significantly more Lawyer respondents considering higher involvement. Arbitrator respondents consider that they involve Lawyers to a significant degree in choosing arbitration procedures and Lawyer respondents confirm this, although individual frequencies do however indicate that Arbitrators perceive that they involve Lawyers to a greater extent than Lawyers perceive their involvement to be.

Table 7.7 Distributions for Lawyers involvement in procedural decisions from the perspective of Lawyers and Arbitrators

Q30 for Lawyer, Arbitrator Q21	1 rarely	2	3	4	5	6	7 always	total	median
Lawyer	1	1	4	5	12	15	11	49	6.0
Arbitrator	0	0	0	3	2	10	19	34	7.0

7.4.2 Involvement of Users in deciding arbitral procedures from the perspective of Users and Lawyers.

Similarly, Lawyers were ask to what level they considered that they involved their clients in the choice of procedures and Users were asked to what level Lawyers involved them in the choice of procedures. From Table 7.8, the higher level of involvement categories (5+6+7) has 38(77.6%) of Lawyers who consider that they involve their clients, with only 6(12.2%) in the lower categories of involvement. On the assumption that expected scores would be equal, chi-squared results in χ^2 = 21.841 and therefore there is a significant difference between the two scores. This indicates that Lawyers consider, to a significant degree, that they involve their User clients in deciding arbitral procedures. Further, the median of the distribution is 7.0, also indicating a high level of involvement in choosing the arbitral procedures. Users have 23(59.0%) respondents who consider that they are involved to the higher degree and only 8(20.5%) considering that they have the lower level of involvement. Using chi-square to test whether there is a significant difference between the number of respondents considering that they have higher

involvement to those considering lower involvement in choosing procedures resulted in $\chi^2 = 6.322$, indicating a significant difference between lower involvement and higher involvement. Users therefore confirm that they also consider, to a significant level, that their Lawyers involve them in deciding procedures to be used. The median for the distribution of Users is 5.0 and whilst lower than that of Lawyers is also indicative of a high level of involvement in choosing procedures.

Table 7.8 Distributions for Users involvement in procedural decisions from the perspective of Users and Lawyers

Q31 for Lawyer, User Q29	1 rarely	2	3	4	5	6	7 always	total	median
LAWYER	1	5	0	5	6	7	25	49	7
USER	0	3	5	8	4	15	4	39	5

It is noticeable that for category 7 there is a large difference between Lawyers who have 25 respondents who consider that they always involve their User clients and only 4 User respondents who consider that they are always involved in deciding procedures to be used by their Lawyers. This indicates that Lawyers consider that they involve their clients to a greater extent than their User clients consider themselves to be involved.

7.4.3 Summary of findings for the involvement of Lawyers and Users in choosing arbitral procedures.

The above data indicates that Arbitrators involve Lawyers and Lawyers involve their clients (Users) to a significant extent in deciding the procedures to be used in arbitrations. It is however evident that Lawyers do not consider that Arbitrators involve them to the extent Arbitrators consider that they involve them. Similarly, but to a greater degree, Users do not consider that they are involved by their Lawyers to the extent that Lawyers consider they involve them. With such significant involvement of Lawyers and Users, then generally there should be an opportunity for suitable procedures to be proposed that enable an efficient and

cost effective arbitration. These matters are influenced by other areas of the research in chapter 9 and expanded in section 10.5 in the discussion on controlling costs.

7.5 ARBITRATORS' ATTITUDE TOWARDS TIME AND COST REVIEWS AND THE TIME SCALE FOR ISSUING PEREMPTORY ORDERS

The extent that Arbitrators and Lawyers interact on time and cost issues provides information that affects the control of time and cost, which were the two most important factors in respect of effectiveness of arbitration according to respondents. Additionally, when a party fails to comply with an order or direction, the amount of time an arbitrator gives before issuing a peremptory order, affects duration and most likely cost. These issues therefore reflect on effectiveness and are an integral part of Research Question 2.

7.5.1 Review of cost and time saving procedures by Arbitrators

Arbitrators were asked to what extent they reviewed cost and time saving provisions with the parties and their advisers. The scale used was a seven- point scale and it can be considered, for the purpose of this analysis, that there is a neutral or transition point at category 4, between those who are less inclined to review cost/time saving provisions and those with a greater inclination towards reviewing cost/time saving procedures. Details of the distributions are shown in Table 7.9.

Table 7.9 Frequencies for cost and time saving reviews by Arbitrators

Arbitrators – Q25 (d) and (e)	1 never	2	3	4	5	6	7 always	total	median	mean
To what extent do you review cost saving procedures with parties	2	0	5	7	6	4	10	34	5.0	4.97
% of total	5.9%	0.0%	14.7%	20.7%	17.6%	11.8%	29.3%	100%		
To what extent do you review time saving procedures with	2	0	4	6	6	5	11	34	5.0	5.15

parties										
% of total	5.9%	0.0%	11.8%	17.6%	17.6%	14.7%	32.4%	100%		

With respect to the review of cost saving, in categories (5+6+7) there are 20 (58.7%) of respondents who review cost saving procedures with the parties, with 7 (20.6%) in categories (1+2+3). Chi square results in χ^2 = 5.333 which is above the critical value for p< .05 thus there is a significant difference between those less inclined towards cost saving review compared to those inclined towards reviewing cost saving. Both the median and the mean of the distribution indicate that the tendency is towards undertaking a cost saving review. There is therefore a majority of Arbitrator respondents who review cost saving procedures with the parties. This result is referred to again in section 10.5 in the discussion on controlling costs.

With respect to the review of time saving, there are 22(64.7%) respondents in categories (5+6+7) who are more inclined to review time saving procedures as opposed to 6 (17.7%) in categories (1+2+3) who are much less inclined to review time saving procedures. Comparing the two groups of categories, chi square test results in χ^2= 8.036, indicating a significant difference between the two sets of categories. Further, the median and mean of the distribution indicates that the tendency is towards reviewing time saving. There is therefore, a majority of Arbitrator respondents who review time saving procedures with the parties. This result is also referred to again in section 10.5 in the discussion on controlling costs.

7.5.2 Allowance of time before issuing peremptory orders

Arbitrators were asked how long they generally allow, from the expiration of the date to comply with an order/instruction, to issuing a Peremptory Order. Four periods of time were given for respondents to indicate the amount of time that, generally, they would allow from the expiration of a time period allowed for an action to be taken in an order/instruction, to the issuing of a peremptory order. This

is shown in Table 7.10. There are 29 (85.3%) respondents who would not, generally, exceed 28 days and of these 23 (67.7%) who, generally, would give less than 15 days, leaving only 5 (14.7%) who would give over 28 days. From this data, it is clear that Arbitrators, generally, do not allow excessive time to pass before issuing a peremptory order. This is an important issue in the control of time. This result is referred to again in section 10.5 in the discussion of controlling costs.

Table 7.10 Time periods given by Arbitrators before issuing a peremptory order

up to 7 days	more than 7 days but less than 15 days	more than 15 days but less than 28 days	more than 28days	total
9	14	6	5	34
26.5%	41.2%	17.6%	14.7%	100%

7.6 ARBITRATORS' EXPERIENCE OF LAWYERS USE OF COURT STYLE PROCEDURES AND LAWYERS EFFECT ON EFFICIENCY OF ARBITRATION.

Having regard to several comments in section 3.2.1, it is evident that after the passing of the AA, there remained concern that lawyers tended to gravitate towards court style proceedings. This, potentially, has an effect on duration and cost of arbitration and therefore on its effectiveness. As Arbitrators are responsible for putting forward the procedural element of arbitration, they were asked to what extent they find Lawyers willing to move from court style proceeding. A seven-point scale was used ranging between "rarely" and "always" departing from court style proceedings. As Lawyers' attitudes may vary, dependent on the size of the arbitration, the information sought was for small, medium and large arbitrations.

7.6.1 Attitude of Lawyers towards using court style proceedings

Table 7.11 shows the frequencies of the distribution for the three different sizes of arbitration. Considering category 4 as neutral/transition point, (1+2+3) are categories where there is less inclination to move away from court style

proceedings and (5+6+7) are categories that favour moving away from court style proceedings.

Table 7.11 Rating for departure from court style proceedings by Lawyers

Arbitrator Q23	1 rarely	2	3	4	5	6	7 always	total	median	mean
Small arbitrations	0	1	1	6	8	7	10	33	6.0	5.48
Medium arbitrations	0	3	4	8	6	7	4	32	5.0	4.69
Large arbitrations	2	10	6	4	4	2	6	34	3.0	3.82

For small arbitrations, 25(76%) of Arbitrators consider that Lawyers are more prepared to depart from court style proceedings, with 2(6%) less inclined. For medium arbitrations it is 17(53%) and 7(22%), whilst for large arbitrations it is 12(35%) and 18(53%). Percentages are to the nearest whole number. Chi-square test was applied to determine any significant difference between the scores for those more inclined to depart from court style proceedings and the scores for those less inclined. Small arbitrations resulted in χ^2 = 17.926 being larger than the critical value for χ^2 for p< .001 and therefore significantly different. For medium sized arbitrations χ^2 =3.375, which is less than the critical value for χ^2 for p< .05 and therefore not significant and for large arbitrations χ^2 = 0.833 which also indicates that p> .5 and therefore not significantly different. In small arbitrations there is a significant number prepared to move away from court style proceedings compared to those who are not. For medium sized arbitrations there are more respondents who would move away from court style proceedings than those who would not, but the difference is not significant. In large arbitrations there are more who are inclined towards using court style proceedings than those who are not, but statistically there is no significant difference between the two views. Both median and means move towards using court style proceedings as the size of the arbitration increases. This indicates, from the experience of Arbitrator respondents, a trend that as the size of the arbitration increases, the willingness of Lawyers to depart from court style proceedings diminishes. These results are

referred to in sections 10.3.4, together with other data not yet dealt with, that modifies the above results.

7.6.2 Involvement of Lawyers and efficiency

In sections 7.4.1 it was established that Arbitrators involve lawyers in choosing procedures, however, from the perspective of Arbitrator respondents, does this involvement actually affect the efficiency of the process? Arbitrators were asked to what extent involving Lawyers improved the efficiency of arbitration. As can be seen in Table 7.12, category 7 has almost a third of respondents considering that such involvement greatly improves the efficiency of arbitration. There are 26(74.2%) of respondents in categories (5+6+7) who consider that there is a positive effect towards improving efficiency, whilst only 3 respondents consider that there is little or no effect on efficiency.

Table 7.12 Rating of Lawyer involvement and efficiency

Arbitrators' Q24	1 not at all	2	3	4	5	6	7 greatly	total	median	mean
frequency	1	1	1	6	8	7	11	35	6.0	5.40
% of total	2.9%	2.9%	2.9%	17.1%	22.8%	20.0%	31.4%	100%		

It is therefore arguable that involving lawyers in deciding procedures to be used, generally, improves the efficiency of arbitration. The data relating to these issues are important when discussing effectiveness of arbitration.

7.7 RESPONDENTS' PREFERENCES WITH CONFLICTING FEATURES

As referred to in the introduction, there are features of arbitration that are in apparent conflict with each other. Respondents were therefore asked to clarify which were the more important from their perspective. This was considered important information in determining any variation in attitude to cost and duration,

these being fundamental to an effective arbitration, according to respondents' replies. The categories of respondent involved vary with the different questions.

7.7.1 Speed of decision v Correctness of decision

There is much that has been said about the time consumed in arbitration[313]. Some of the other dispute resolution methods are potentially quicker than arbitration, but can be susceptible to errors or injustices[314]. It is therefore important to determine the respondents' opinion in respect of speed and error. To obtain the opinions from all three categories of respondents, each were asked if the speed of getting a decision is more important than getting a decision that is correct. A five point Likert scale has been used with a neutral or transition at category 3.

Table 7.13 Distributions for speed v. correctness of decisions

Q22 for Lawyer, Q20 for User and Q14 for Arbitrator	1 rarely	2 not generally	3 neutral	4 generally	5 Almost always	total	median	mean
Lawyer	15	23	6	10	0	54	2.0	2.20
User	17	16	7	4	0	44	2.0	1.95
Arbitrator	18	10	4	2	1	35	1.0	1.80
TOTAL	**50**	**49**	**17**	**16**	**1**	**133**	**2.0**	**2.02**
% of total	**37.6%**	**36.8%**	**12.8%**	**12.0%**	**0.8%**	**100%**		

As can be seen from Table 7.13 that speed, overall, is not considered by 99 (74.4%) of the respondents to be more important than getting the correct decision. The Kruskal-Wallis test resulted in there being no significant difference between the ranked scores for Arbitrators, Lawyers and Users, $H(2) = 4.339$ $p = .114$. Considering those who prefer a correct decision, using combined data of the three categories of respondent, categories (1+2), to those for whom speed is more

[313] Latham, M. (1994) Constructing the Team, *Final Report of the Government/Industry Review of Procurement and Contractual Arrangements in the UK Construction Industry.* HMSO : London.
[314] Section 3.4.4.2 outline of statutory adjudication and section 3.4.4.3 outline of mediation.

important, categories (4+5), using chi square test χ^2 = 56.560 which is considerably larger than the critical value for χ^2 for p< .001 which is 10.827. There is therefore, a significant difference, even at p<.001, between those respondents who consider a correct decision is more important, to those respondents who consider speed to be more important. It can therefore be said that a significantly large majority of respondents consider a correct decision to be more important than getting a speedy decision. This result could be discussed further, however there are matters of importance that require including in such a discussion, but not yet dealt with in the thesis and therefore the discussion is in section 10.5.

7.7.2 Cost saving v Justice between the parties

A question asked respondents to determine their opinion as to whether saving cost is more important than a decision that provides justice between the parties. Overall there are 93(70%) respondents who consider that justice between the parties is the more important with 14(10.5%) who did not. Using chi-square test χ^2= 56.860, therefore there is a significant difference between those considering justice is more important compared to those considering cost saving the more important. In addition the medians for the overall and the individual categories of respondent support the view that respondents consider that justice between the parties to be the more important. The Kruskal-Wallis test resulted in there being no significant difference between the ranked score distributions for any of the three categories of respondents, H(2) = 5.143, p = .076.

Table 7.14 Frequencies for cost saving v. Justice between the parties

Q23 for Lawyer, Q21 for User and Q15 for Arbitrator	1 rarely	2 Not generally	3 Neutral	4 Generally	5 Almost always	total	median	mean
Lawyer	11	26	11	5	1	54	2.0	2.24
User	11	15	12	4	2	44	2.0	2.34

Arbitrator	12	18	3	2	0	35	2.0	1.86
TOTAL	**34**	**59**	**26**	**11**	**3**	**133**	**2.0**	**2.17**
% of total	**25.6%**	**44.4%**	**19.5%**	**8.3%**	**2.2%**	**100%**		

Therefore a majority, to a significant level, consider that cost saving is not as important as obtaining a decision that provides justice between the parties. Clearly, justice between the parties is fundamental and there is a statutory obligation on the arbitrator[315] to act fairly, allowing parties to be able to deal with their own case and the other party's case and to use procedures suitable for the case. The contradiction here is that results shown later in the thesis[316], indicate that respondents have an overall preference for mediation and adjudication, both having the possibility of resulting in some injustice as referred to above[317]. There are comments that add to this subject, but are contained in data not yet dealt with and expanded in the discussion chapter.

7.7.3 Quick decision v Full amount claimed

Respondents were asked whether, on the assumption that a claim was fully justified, whether it was more important to get a quick decision rather than getting the full amount of the claim if this would take a long time to ascertain. Considering the combined scores, Table 7.15, there is a little more than half, 69(52.2%), of the respondents who consider that it is better to obtain the full claim even if this takes longer to achieve. There is however a sizable number of respondents, 39(29.5%), who prefer to have a quicker determination, even if this results in not getting the full claim. There is a significant difference between the two views, to that expected[318], with chi-squared χ^2= 7.788, this being above the critical value for χ^2 at p< .01. In respect of the individual scores, Lawyers and Arbitrators consider, to a significant degree, that getting the full amount claimed is more important than a quick decision (Lawyers χ^2 = 6.568 and Arbitrators χ^2 =7.259). Users would rather

315 AA s.33
316 Tables 9.1, 9.6 and 9.7
317 Section 3.4.4.2 for adjudication and 3.4.4.3 for mediation
318 The expected values for each view being equal

have a quick decision, although the difference between those who would rather have the quick decision rather than the full amount of the claim is not significantly different (χ^2 =0.108), further the median falls in category 3, being the neutral position. The result of Kruskal-Wallis test is that there is no significant difference between distribution for the three categories of respondents H(2) = 3.682, p = .159.

Table 7.15 Frequencies for quick decision v full amount claimed

Q28 for Lawyer, Q24 for User and Q19 for Arbitrator	1 rarely	2 Not generally	3 neutral	4 generally	5 Almost always	total	median	mean
LAWYER	8	23	10	11	2	54	2.0	2.56
USER	9	8	7	19	1	44	3.0	2.89
ARBITRATOR	8	13	7	3	3	34	2.0	2.41
TOTAL	**25**	**44**	**24**	**33**	**6**	**132**	**2.0**	**2.63**
% of total	**18.9%**	**33.3%**	**18.1%**	**25.0%**	**4.5%**	**100%**		

The overall result is there are significantly more respondents who consider, subject to having a justifiable claim, it more important to obtain the correct amount claimed, rather than restrict the time taken to achieve it. Both Lawyers and Arbitrators hold the same view. Users have more respondents who would rather have the quicker decision, although it is not significantly more and the median suggests a neutral position. This is important in that it is the Users that have to pay, but they are almost evenly split between the two views.

7.7.4 Attitudes towards winning at all costs

As it is Users who ultimately pay the costs incurred, they were asked to what extent they took the attitude of winning at all cost. There are 21 (48.8%) respondents who consider that it is not win at all cost, but there are 12 (27.6%)

who consider that it is. There is a noticeable difference in these scores, however using chi-square $\chi^2 = 1.939$[319] indicates that the difference is not significant.

Table 7.16 Attitude to winning at all costs

Q25 for User	1 rarely	2 Not generally	3 neutral	4 generally	5 almost always	total	median	mean
USER	5	16	10	9	3	43	3.0	2.74
% of total	11.6%	37.2%	23.3%	20.9%	7.0%	100%		

Whilst there are noticeably more who consider that it is not to win at all cost, there is no significant difference between the scores for not winning at all cost and winning at all cost. The implication of this result is that whilst, generally, it is not a win at all cost culture, there is a sizable minority for whom it is. This result is referred to again in the discussion on controlling costs in chapter 10.

7.8 DISCUSSION OF RESULTS

Research Question 2 considers features that have an influence on the effectiveness of the arbitral procedures in construction arbitration. The overall opinion of respondents, from the bank of features investigated, was that controlling cost and duration of arbitration and complying in a timely fashion with arbitrators' instructions, were the most important aspects in respect of the effective running of arbitration. Those features which were restrictive, such as limiting the amount of time at the oral hearing, limiting documentation and the like were considered of less importance by both User respondents and particularly by Lawyer respondents. As features limiting a particular action are likely to influence duration and/or cost, they are also likely to have an influence on the efficiency and effectiveness of arbitration. As the limiting features are not rated particularly highly by Lawyer and User respondents, there may be a reluctance to implement them into the arbitral process. This in itself may maintain arbitration as a slow and expensive method of resolving construction disputes. Both Beynon and Brooker

[319] For chi squared, the expected values were taken as equal having taken out the neutral value, being half the total minus the neutral score.

used empirical data to show that arbitration was slow and not cost effective, Beynon from arbitrator respondents and Brooker from main and sub-contractor respondents. Reynolds derived arbitration as slow and expensive from the perceptions of arbitrators in interviews. This research extends that of Beynon, Brooker and Reynolds, by obtaining data from all three major players, that is, Arbitrator, Lawyer and User respondents and extending the features that are rated beyond merely duration and cost.

The remaining features considered in Research Question 2 and forming part of the answer to Research Question 2, all have an influence on either duration or cost or both and therefore are features influencing the effectiveness of arbitral process. The extent that arbitrators involve lawyers and lawyers their clients in deciding procedures to be used has a fundamental influences on how arbitration is conducted and thereby the effectiveness of the process. Respondents indicated, to a significant degree, that Arbitrators involved Lawyers and Lawyers involved Users in deciding procedures to be used. This therefore begs the question as to why arbitration is not used more, when parties can have whatever procedures they wish to provide the most effective means of resolving the particular dispute. It also highlights the paradox that with the power to influence procedures available to them, parties and their advisors seem unwilling to implement changes that might make the process more efficient even though they consider that controlling cost and time are important. This arguably indicates some form of externalisation of the problem rather than taking ownership and taking steps to deal with it. This is new insight as there does not appear to be any previous empirical data relating to the degree of involvement of arbitrator, lawyer and user in deciding procedures to be used. Having decided procedures, it is important that as the arbitration progresses, some check is made as to whether the process is working effectively or whether changes are required. A significant number of Arbitrator respondents said that they carried out reviews on matters affecting duration and cost of arbitration. This should further enhance arbitration and its use, but this does not appear to be the case as revealed in the previous chapter. Here also there does not appear to be any previous empirical data relating to the extent that arbitrators review duration and cost during the arbitral process. With respect to arbitrators issuing peremptory

orders for non-compliance with an order/ direction, which subsequently influences duration and cost, the majority of Arbitrator respondents showed that they would give 15 days or less, from the expiry date of an order/direction to issuing a peremptory order. This is a relatively short period of time and shows that the majority of Arbitrator respondents are not prepared to let the process drift. There does not appear to be any previous empirical data relating to this matter.

As referred to previously[320], court style procedures are considered as detracting from arbitration and its effectiveness. Data from Arbitrator respondents' shows, from their perspective, that party lawyers are prepared to move away, to a significant degree, from court style procedures, but in only small arbitrations. In medium arbitrations, there were more lawyers prepared to move away from court style proceedings, but not to a significant degree. In large arbitrations there were more reverting to court style procedures, than those not, but the difference was not significant. Clearly as the size of the arbitration increases, so does the desire to move away from court style procedures diminish. Black and Fenn showed that a high proportion (67%) of their respondents implemented court style procedures. Beynon, using empirical data, showed arbitration was like litigation, whilst Brooker and Reynolds found, from interview data, that there was a tendency towards court style procedures. This research thus extends and updates the existing research.

Controlling duration and cost are central issues for effectively conducting arbitration, however there are other issues that modify the attitude of respondents to this research. It was found that getting a correct decision was significantly more important to respondents than the speed of arbitration. Similarly getting justice between the parties was significantly more important than saving costs. The above preferences should favour the selection of arbitration. The contradiction here suggests other underlying factors at play, some of which will be explored in subsequent chapters. With respect to getting a quick decision rather than spending time and money to obtain the full amount claimed, there are more Users

[320] Section 7.6

who prefer a quick decision, but the difference between the two views is not significant. Lawyers and Arbitrators prefer, to a significant degree, to go for the full amount. More User respondents considered that it was not a win at all costs attitude, but the difference with the opposing view was not significant. These issues are of importance and show how the parties and their advisers view alternative approaches influencing duration and cost. This clearly offers new perspectives on the subject as there does not appear to be any previous empirical investigation regarding these alternative views.

7.8 SUMMARY OF CHAPTER

This chapter has dealt with the rating of the importance of features influencing the effective running of arbitration. It has also considered the involvement between Arbitrator, Lawyer and User respondents in deciding procedures to be used. Duration and cost reviews by Arbitrator respondents during the arbitral process were investigated together with Arbitrators' experience of Lawyers' willingness to move away from court style procedures. Finally, features involving either duration or cost of arbitration being potentially modified by other conflicting opinions were also considered. The next chapter extends further the understanding of arbitration by exploring how it is rated as a method and the circumstances where respondents consider it might be selected as the method of choice for resolving construction disputes.

CHAPTER 8 RATING OF ARBITRATION AND CHOICE OF DISPUTE RESOLUTION METHOD

8.1 INTRODUCTION

Having considered in chapter 6 the use and trend in the use of arbitration and the factors that influence parties to choose arbitration and in chapter 7 the factors that influence the effectiveness of arbitration, it remains to determine respondents' views of the arbitral process and where arbitration stands compared to choosing other methods. This leads to Research Question 3 which states "*How is arbitration viewed as a method of resolving construction disputes*". Whilst rating arbitration reflects the perception of the respondents as to their view of the suitability of arbitration as a method of resolving construction disputes, it cannot be assumed that rating will be a reflection of what they would actually choose in given circumstances. Respondents were therefore asked when they would choose arbitration, as opposed to the alternatives of litigation, statutory adjudication, mediation and expert determination with variables of size of claim and size of dispute. This leads to Research Question 4 which states "*In what circumstances would arbitration be considered the method of choice for resolving construction disputes*"

8.2 RATING OF ARBITRATION

A Likert type rating scale, which is a scale giving respondents a number of choices of how they respond to a question, was used giving seven choices from 1 = poor to 7 = excellent. This enables the score of 4 to be taken as neutral, being neither poor nor excellent. The presentation of the data shows the frequencies for each of the seven choices, ranging between 'poor' and 'excellent', for each size of dispute. The data is shown in tabular form. As there are data from both construction lawyers and users of arbitration, these data are first combined to give an overall result and then considered individually. These data therefore provides a measure of how respondents view arbitration purely as a method of dispute resolution over different sizes of dispute. The size of dispute was defined in the questionnaire, see appendix 1.

8.2.1 The overall rating of arbitration combining Lawyers & Users data

Combining the scores for Lawyers and Users gives an overall measure of the rating of arbitration. Table 8.1 shows the frequencies for each of the categories between poor (1) and excellent (7) for each size of dispute, small, medium and large. Further, as category 4 can be considered as neutral, the sums of categories (1+2) and (1+2+3) are shown on the poor side of neutral and the sum of categories (6+7) and (5+6+7) on the excellent side of neutral. These summations are shown to allow an easy and ready assessment of the rating of arbitration for each size of dispute. As can be seen from Table 8.1, overall for all sizes of dispute, there are 136 respondents on the poor side of neutral, whilst 100 respondents are on the excellent side of the scale, with 52 neutral. The overall mean is 3.65, being category 4 to the nearest whole number. Therefore, from this data, respondents consider, overall, that arbitration is neither poor nor excellent. Individually, for small disputes there are 63 scores to the poor side of neutral, with 21 to the excellent side of neutral and with the mean of the distribution being 2.91. For small disputes arbitration is rated at category 3, which although on the poor side of neutral is only one category below neutral and therefore not considered by respondents as being excessively poor. Similarly for medium sized disputes there are more scores to the poor side of neutral than to the excellent side of neutral, being respectively 47 and 31 and a mean of distribution of 3.6. Taking this mean to the nearest whole number, it is considered as neutral value 4, which is neither poor nor excellent. Regarding large disputes the scores are larger for the excellent side of neutral, being 48 with 26 for the poor side of neutral and a mean of the distribution being 4.38. Considering the mean of the distribution for large disputes and taking the nearest whole number, this puts large disputes at neutral, again neither poor nor excellent. As is readily observed, the means of the distributions increase as the size of the dispute increases with 2.91 for small disputes to 3.64 for medium sized disputes and to 4.38 for large sized disputes. This indicates that as the size of the dispute increases, so does the rating of arbitration increase.

Table 8.1 Rating of arbitration – combined data of Lawyers and Users

	poor								excellent			
	1+2	**1+2+3**	1 (-3)	2 (-2)	3 (-1)	4 (0)	5 (1)	6 (2)	7 (3)	**5+6+7**	**6+7**	**mean**
small dispute	47	63	27	20	16	12	14	3	4	21	7	**2.91**
medium dispute	26	47	6	20	21	18	18	9	4	31	13	**3.64**
large dispute	16	26	5	11	10	22	23	15	10	48	25	**4.38**
TOTAL	**89**	**136**	**38**	**51**	**47**	**52**	**55**	**27**	**18**	**100**	**45**	**3.65**

The distributions vary for the different sizes of dispute, but to test whether there is any significant difference in the distributions, Friedman's Two-Way Analysis of Variance of Ranks is used to determine the differences between the groups (in this case each size of dispute). This is a test designed to deal with the situation where there are several related groups and the different data is from the same source, as opposed to independent groups. Using Friedman's ANOVA there is a significant difference in the scores χ^2 (2) = 92.718, p = .000, therefore the distributions are significantly different to each other. This remains so after using the follow up procedure to Friedman's ANOVA. For small disputes and medium sized disputes r = - .438, z = – 4.274 and p = .000, for medium disputes and large disputes r = - .350, z = -3.428 and p = .002 and for small disputes and large disputes r = - .788, z = -7.722 and p = .000. Respondents' rating of arbitration is significantly different for each size of dispute therefore the size of the dispute has an effect on the outcome. In addition the mean ranks show an increase as the size of the dispute increases, with small = 1.42, medium = 2.04 and large = 2.54, also indicating that as the size of the dispute increases, so does the rating of arbitration increase.

8.2.2 Individual rating of arbitration from Lawyers' and Users' perspective

The same process described in section 8.2.1 was carried out for Lawyers and Users individually[321]. The results of the analyses are shown in Table 8.2. There is little difference between the means of Lawyers and Users for small sized disputes

[321] See appendix F for the tables of frequencies for the individual Lawyers and Users ratings.

(Lawyers 2.89, Users 2.93) and medium sized disputes (Lawyers 3.72, Users 3.53). There is however almost a category difference between the means for large disputes (Lawyers 4.72, Users 3.93). Except for small sized disputes where the difference in means is negligible, the means for medium and large disputes are greater for Lawyers than for Users, indicating that Lawyers rate arbitration higher than do Users and particularly so for large sized disputes. Both the means of the distribution and the mean ranks show an increase in size, as the size of dispute increases, which is common with the combined result. This indicates that as the size of the dispute increases, so does the rating of arbitration increase. With regard to differences in the distributions between the different sizes of dispute, only medium to large disputes had an insignificant difference for Users, the remaining being significantly different. Frequency tables for the individual Lawyers and Users are shown in Appendix F.

Table 8.2 Rating of arbitration – analyses of Lawyers and Users

	Lawyers	Users
mean of distributions -		
small	2.89	2.93
medium	3.72	3.53
large	4.72	3.93
Friedman's ANOVA	$X^2(2) = 56.356$, p= .000	$X^2(2) = 40.682$, p=.000
adjusted Friedman's ANOVA -		
small v medium disputes	r = -.264, z = -2.742, p = .018	r = -.367, z = -3.388, p = .002
medium v large disputes	r = -.361, z = -3.753, p = .001	r = -.080, z = -.730, p = 1.000
small v large disputes	r = -.625, z = -6.495, p = .000	r = -.447, z = - 4.118, p= .000
mean rank of distribution –		

Small disputes	1.41	1.44
Medium disputes	1.94	2.18
Large disputes	2.66	2.58

8.2.3 Summary of rating of arbitration

Rating arbitration as a method of dispute resolution for the combined scores for Lawyers and Users was a little over neutral for large disputes, a little under neutral for medium disputes and on the scale used, virtually category 3 for small disputes. Arbitration therefore is not highly rated as a method of dispute resolution for construction disputes, but neither is it poorly rated, not even for small disputes. Individually Lawyers rate arbitration higher than Users for medium and large disputes, but are almost the same for small disputes. Only Lawyers exceed neutral and that is in large disputes. The means of the distributions increase as the size of the dispute increases for the overall result and the individual results. There is a significant difference in the rating for the different sizes of dispute, except between medium and large disputes for Users, where there is no significant difference. Further, the rating improves as the size of the dispute increases.

The inference from the data therefore, which is the answer to Research Question 3, is that arbitration, overall, is rated around the neutral position between poor and excellent and the rating significantly increases as the size of the dispute increases. Individually, arbitration for small disputes is rated similarly by both Lawyers and Users, however for medium and particularly large disputes Lawyers give a higher rating than Users. There is also an increase in the rating by both Lawyer and User respondents as the size of the dispute increases.

8.3 PREFERENCE OF DISPUTE RESOLUTION METHOD

In section 3.4.4 the main alternatives to arbitration were discussed. It is acknowledged that many construction contracts state the method of dispute

resolution in the event of a dispute arising. This investigation is in respect of determining where and in what circumstances arbitration might be considered as a suitable first choice rather than one of the other methods of dispute resolution and answers Research Question 4, which states "*In what circumstances would arbitration be considered the method of choice for resolving construction disputes*". Here differing circumstances were limited to differences in size of claim and size of dispute. There were five categories of monetary claims, ranging from under £50,000 to over £10 million and three sizes of dispute; small, medium and large. The methods investigated were arbitration, litigation, statutory adjudication, mediation, expert determination and a category of other. Responses to the category of 'other' mainly referred to negotiation. Negotiation, which would usually be the first step to resolving the dispute, was not included as it was considered that for the purpose of this research, negotiation between the parties had failed, thereby resulting in parties having to use a method that required intervention by a third party. All calculations are based on the responses involving the five methods of dispute resolution having a third party input.

First the scores for Lawyers and Users were combined to give an overall result that encompasses all sizes of dispute and for all monetary values for each method of dispute resolution. The combined scores for each size of dispute were then obtained, allowing the determination of how the different sized dispute affects the choice of the method of dispute resolution. Finally the responses are discussed individually for Lawyers and Users. It was therefore possible to determine respondents' opinion of the different methods of dispute resolution and where they stand in relationship to one another, over a range of claim values and dispute sizes. In particular, this indicates the relationship of arbitration against the other methods of dispute resolution.

8.3.1 Overall dispute resolution preference of Lawyer and User respondents

Table 8.3 shows the combined scores for all sizes of monetary claim and all sizes of dispute for each of the methods of dispute resolution. This provides for an

overall result from which it can be determined the standing, in relationship to one another, of the different methods. To determine whether there is any significant difference between choosing arbitration or a different method, it is necessary to determine whether there is a significant difference in the score for arbitration and the sum of the remaining scores for the other methods. The reasoning is that a score for any other method is effectively a score against using arbitration.

Table 8.3 shows the total scores received for each of the methods under consideration. There are 151 out of a total of 1304 first choice scores (11.58%) for arbitration, hence, clearly the chance of arbitration being selected is considerably less than for one or other of the alternative methods. Applying chi-square test[322] with Yate's correction for two categories (one degree of freedom) to test for any significant difference between the actual score for arbitration and the number of scores for the remaining methods, $\chi^2 = 57.259$ which is considerably larger than the critical value for χ^2 for $p < .001$ which is 10.827. The score for arbitration is therefore significantly lower than would be expected compared to the score for the sum of the remaining other methods, to a degree $p < .001$. Therefore the chance of arbitration being selected as the first choice method is significantly lower than would be expected in respect of the assumption made.

Table 8.3 Overall frequencies for the method of dispute resolution as first choice with variables of size of dispute and claim

Total first choice method for **all** sizes of dispute & values of claim **COMBINED**	***arbitration***	litigation	adjudication	mediation	expert determination	TOTAL
TOTAL	***151***	**312**	**397**	**401**	**43**	**1304**
% of grand total	***11.58%***	**23.93%**	**30.44%**	**30.75%**	**3.30%**	**100%**

[322] The expected value for the scores is based on each method being equal in popularity and receiving the same number of scores. Therefore the expected score for arbitration is 20% of the total score and the remaining methods having an expected score of 80% of the total score.

8.3.2 First choice scores for each method of dispute resolution for all values of claim in small disputes

Table 8.4 shows the combined scores for Lawyers and Users for each method of dispute resolution for all of the monetary values of claim for small disputes. Chi-square test was again used to determine the significance of the total score for arbitration compared to the total of the other methods for reasons as discussed immediately above. Using chi-square with Yates's correction, this resulted in χ^2 = 23.661 which is considerably larger than the critical value for χ^2 for p< .001. The score for arbitration is significantly lower than would be expected compared to the sum of the remaining methods.

Table 8.4 Overall frequencies for the method of dispute resolution as first choice with variable claim values for small disputes

SMALL DISPUTES – **COMBINED** Lawyer & User FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***2***	8	36	28	5	79
Over £50K under £200K	***1***	7	40	36	3	87
Over £200,000K under £1 m.	***8***	15	39	24	1	87
Over £1 m. under £10 m.	***17***	24	23	22	2	88
Over £10 mill	***17***	34	15	18	4	88
TOTAL	***45***	**88**	**153**	**128**	**15**	**429**
% of total	***10.49%***	**20.51%**	**35.66%**	**29.84%**	**3.50%**	**100%**

For claims under £1 million, adjudication and mediation have considerably larger scores than either arbitration or litigation. Despite the result of the total scores over all of the monetary values, the values over £1 million are more supportive of arbitration than the total score suggests. For the category 'over £1 million and under £10 million', the scores for arbitration are close to the scores for litigation, adjudication and mediation. In respect of the category of 'over £10 million', arbitration scores better than adjudication and close to that for mediation. Chi-square test indicated that there was no significant difference between the scores

for arbitration and the scores for adjudication and mediation for the categories of monetary claim over £1 million and for litigation for the monetary values of over £200,000 and under £10 million[323] (χ^2 = 0.486 and 3.063 respectively). In addition the scores for arbitration, adjudication and mediation for the category over £10 million, on the assumption that they are equally popular, are not significantly different to that expected with χ^2 = .280. Arbitration has a much improved chance of being selected for the values over £1 million and under £10 million, where there is no significant difference between scores for arbitration, litigation, adjudication and mediation, with χ^2 = 1.349. For values over £10 million it remains that it has an improved chance of being selected, although litigation has double the number of respondents preferring litigation to arbitration at this level of claim.

8.3.3 First choice scores for each method of dispute resolution for all values of claim in medium disputes

The same process was used for medium sized disputes as for small sized disputes and Table 8.5 shows the combined scores for each method and for each monetary value of claim. Chi-square test was used to determine the significance of the total score for arbitration compared to the total of the other methods for reasons as discussed previously. Using chi-square with Yate's correction, this resulted in χ^2 = 33.853 which is considerably larger than the critical value for χ^2 for $p < .001$, therefore there is a significant difference between the score for arbitration and the total scores of the remainder of the methods.

Again, the scores for adjudication and mediation are considerably larger than those for arbitration and litigation for claims under £1 million. Following the same arguments as for small disputes, the scores for arbitration are not significantly different to the scores for litigation, adjudication and mediation for the category of claim over £1 million and under £10 million. In this claim category, arbitration has an improved chance of being selected.

[323] The calculation for arbitration, adjudication and mediation assumes that each would have equal expected values. Between arbitration and litigation the expected values are assumed to be equal.

Table 8.5 Overall frequencies for the method of dispute resolution as first choice with variable claim values for medium disputes

MEDIUM DISPUTES - **COMBINED** Lawyer & User FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***3***	7	39	30	2	81
Over £50K under £200K	***2***	8	41	35	2	88
Over £200,000K under £1 m.	***9***	18	34	28	1	90
Over £1 m. under £10 m.	***21***	27	15	24	3	90
Over £10 mill	***19***	38	8	20	4	89
TOTAL	***54***	**98**	**137**	**137**	**12**	**438**
% of total	***12.33%***	**22.37%**	**31.28%**	**31.28%**	**2.74**	**100%**

In addition, the actual scores for arbitration are similar to those of mediation and greater than those for adjudication for values over £1 million. With respect to litigation, scores for arbitration are close for the monetary value of '£1 million to under £10 million', but half of those for litigation for values over £10 million. For medium disputes therefore, the comments of the improved chance of arbitration being selected are the same as for small disputes.

8.3.4 First choice scores for each method of dispute resolution for all values of claim in large disputes

Table 8.6 shows the combined scores for each method for all of the monetary values of claim for large sized disputes. Considering the total score for arbitration, compared to the total of the remaining methods and using chi-square test with Yate's correction, this resulted in $\chi^2 = 14.871$, which is considerably larger than the critical value for χ^2 for $p < .001$, therefore there is a significant difference between the score for arbitration and the total of the scores of the remaining methods.

Table 8.6 Overall frequencies for the method of dispute resolution as first choice with variable claim values for large disputes

LARGE DISPUTES – **COMBINED** Lawyer & User FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***4***	13	33	28	3	81
Over £50K under £200K	***5***	14	31	35	3	88
Over £200,000K under £1 m.	***11***	23	24	29	3	90
Over £1 mill. under £10 m.	***17***	35	12	23	3	90
Over £10 mill	***15***	41	7	21	4	88
TOTAL	***52***	**126**	**107**	**136**	**16**	**437**
% of total	***11.63%***	**30.43%**	**23.94%**	**30.42%**	**3.58%**	**100%**

Adjudication and mediation received much greater score than arbitration and litigation for claims under £1 million, but the differences are a little reduced compared to small and medium disputes. Taken individually and assuming equal popularity, the scores for arbitration are not significantly different to the scores for adjudication ($\chi^2 = 2.823$) and mediation ($\chi^2 = 1.592$) for the categories of monetary claim over £1 million and for litigation for the monetary value of 'over £200,000 and under £1 million' ($\chi^2 = 3.559$)[324]. For large disputes arbitration has an improved chance of being selected for values between £1 million and £10 million and whist the chances are improved for values over £10 million, this is reduced due to the strength of litigation.

8.3.5 Inferences from the overall combined data and the combined data for the three sizes of dispute individually

The inference from the combined data, which includes all sizes of dispute and all values of claim, indicate that the score for arbitration is significantly lower than that which would be expected and similarly for the combined data for each size of dispute. Therefore, the size of the dispute does not have any significant effect on

[324] For 1 degree of freedom and for $p < .05$, $\chi^2 = 3.841$

the overall result. From an overall perspective, arbitration has a poor chance of being selected. All of the combined results are very much influenced by the high scores for adjudication and mediation for values under £1 million. There are however, ranges of claim where arbitration frequencies indicate a better chance of selection than the overall result would suggest. With respect to values over £1 million, for all sizes of dispute using the combined data, the scores for arbitration are much improved. In addition, for small and medium sized disputes, the scores for arbitration are not significantly different to those of adjudication and mediation for monetary categories over £1 million; further the actual scores are similar. Arbitration therefore, for small and medium sized disputes, has a much improved chance of being selected for the values between £1 million and £10 million. For values over £10 million, it remains that arbitration has an improved chance of being selected, although litigation is the stronger contender, particularly for large disputes.

8.3.6 Individual perspectives of Lawyers and Users in choosing the method of dispute resolution as first choice

The tables showing the details of the frequencies for Lawyers and Users separately are contained in appendix F. The most obvious feature is that for Lawyer respondents, there are high scores for litigation for values over £200,000 for all sizes of dispute, whilst in large disputes moderate scores are achieved even for claims under £200,000. This indicates strong support for litigation by Lawyers. With respect to Users, it is almost the reverse, that is, litigation receives low scores throughout, except for values over £10m. Both Lawyers and Users almost disregard expert determination as a construction dispute method.

With respect to adjudication, User respondents have high scores for values under £1m., for all sizes of dispute. Lawyers have high scores for small and medium disputes for values under £1m., however for large disputes scores drop dramatically for claim values over £200,000. Above these levels of claim, adjudication scores fall away. Adjudication is therefore regarded as more suitable as first choice for both Lawyers and Users for the lower level of claim. Mediation scores from Lawyers are more consistent, but do reduce for values over £200,000

for small disputes and over £1m. for medium disputes. Users regard mediation as more suitable as first choice for values under £1m. for medium and large disputes and £10m. for small disputes. Lawyers' scores for adjudication are therefore higher than those for mediation in the lower level of claim, thereafter scores for mediation are higher than adjudication, except for small disputes where they are similar. With respect to Users' scores, there is little difference between adjudication and mediation scores for all sizes of dispute.

Arbitration scores for Lawyers are generally low throughout, although they do increase as the value of claim increases. Users are more supportive of arbitration, where the scores are higher than any of the other methods for values between £1m and £10m for all sizes of dispute, whilst for values over £10m it has scores equal or close to those of litigation.

The general effect of the individual scores of Lawyers and Users on the combined scores is that for litigation and arbitration there is a levelling effect due to the generally opposing views of Lawyers and Users. For adjudication and mediation there is a cumulative effect due to Lawyers and Users generally having a similar opinion. These factors result in arbitration scores being considerably less than adjudication and mediation for the lower value claims, indicating that arbitration is less likely to be chosen in the ranges under £1 million. For values over £1 million and up to £10 million the influence of Users has made it such that arbitration has a much improved chance of being selected and for values over £10 million although the chances are improved for arbitration, litigation has a considerably higher score than arbitration for this monetary value and therefore more likely to be chosen

8.3.7 Overall findings of Lawyer and User respondents' preference of first choice method of dispute resolution

The combined scores for both Lawyers and Users over all the sizes of dispute and value of claim allows the total score for arbitration and the total score for the

alternative methods to be determined. It is clear from Table 8.3 that arbitration attracts a small number of 151 (11.58%) of the total possible first choice score of 1304. Chi-square test confirmed that this number is significantly different and lower to that which would be expected, with $p < .001$. Considering the overall result, arbitration has a poor chance of being selected. It is important to note having regard to Table 8.3, that no one method has a very large percentage of scores, with adjudication and mediation, the two highest, being at the 30% mark.

Breaking the analysis down further, resulted, for all sizes of dispute, in the score for arbitration being significantly different to that expected compared to the total scores of the remaining methods, again at the $p <.001$ level. Therefore the size of dispute does not have any significant influence on the overall result in the above paragraph.

It can be seen from the results by size of dispute that scores for mediation and particularly adjudication are high for both Lawyers and Users for most values under £1 million for all sizes of dispute. Adjudication does have larger scores than mediation in the lower values of claim and whilst both adjudication and mediation for values under £1 million are regarded as the more suitable methods as first choice, adjudication is considered a little ahead of mediation. Adjudication scores however, generally, decline for values over £1 million, suggesting that adjudication is much less likely to be chosen as first choice for the higher value of claim. Mediation scores tend to reduce for values over £1 million, however the reduction in scores is not excessive, with mediation maintaining more consistency in the number of scores through the different levels of claim. This indicates that mediation is considered a suitable method over all values of claim and size of dispute and particularly so for values under £1 million. The scores for litigation for values over £10 million for small and medium disputes and over £1 million for large disputes are well above those for adjudication and mediation and therefore it is over these values that litigation is more likely to be chosen.

Arbitration is therefore squeezed between these three methods; that is adjudication and mediation at the lower level of claim values and litigation at the higher level of claim values. In answer to Research Question 3, for values under £1 million arbitration has a poor chance of being a first choice selection. With respect to values over £1 million for small and medium sized disputes and between £1 million and £10 million for large disputes, the scores for arbitration are not significantly different to the scores[325] had each method been equally popular. Further, the actual scores for arbitration are close to, or larger than the other methods, thereby indicating that the chances of arbitration being chosen as first choice are similar, or not significantly different to that of the other methods in the ranges of value of claim referred to immediately above. For values over £10 million, litigation has the highest scores for all sizes of dispute and therefore the greatest chance of being selected as first choice and particularly so for large disputes. With respect to arbitration for values over £10 million, scores over all sizes of dispute are similar to those of mediation and larger than for adjudication. Therefore, the chances of arbitration being selected are much greater than in the lower values under £1 million, nonetheless litigation has the greatest chance of being selected for values over £10 million as referred to above.

Individually Users are more supportive of arbitration than are Lawyers. As might be expected Lawyers are supportive of litigation, other than for the small values mentioned above. Users however do not support litigation other than for values over £10 million.

8.4 REASONS FOR PREFERENCE OF A METHOD

There was a question asking respondents to give reasons for choosing a particular method if they would choose that method rather than arbitration. For both Lawyers and Users the main reasons given that, compared to arbitration, their choice of method was quicker, cheaper and less complex than arbitration.

[325] Chi-square assumption of expected values.

8.5 ATTITUDE TOWARDS USING ARBITRATION IN THE FUTURE

Having considered decline and use of arbitration, factors affecting choice and effectiveness of arbitration in previous chapters and rating and choice of dispute resolution method in this chapter, it remains to determine the attitude of respondents toward whether they would consider using arbitration in the future. Lawyers and Users were therefore asked whether they would advise using/use arbitration again. From Table 8.7 there is little difference between the percentages for Lawyers 37(74%) who would use arbitration again and Users 27(73%). Considering the combined result of Lawyers and Users, there are 64(73.6%) respondents who would use arbitration as opposed to 23(26.4%) who would not. Using chi-square for the overall scores and assuming that the expected result would be equal, chi-square resulted in $\chi^2 = 18.40$ which is considerably larger than the critical value for χ^2 for $p < .001$. There is therefore, a significant difference, even at the $p<.001$ level between the 'yes' and 'no' responses**,** thus a significant number of respondents would consider using arbitration in the future.

Table 8.7 Future use of arbitration by Lawyers and Users

Q36 for Lawyer, User Q31	yes	no	total
Lawyer	37	13	50
User	27	10	37
TOTAL	**64**	**23**	**87**
% of total	**73.6%**	**26.4%**	**100%**

8.6 DISCUSSION OF RESULTS

Respondents' perception of arbitration as a method for resolving construction disputes has been investigated, with the inference that, overall, arbitration is considered neither a poor method, nor excellent method. Brooker obtained a

similar result when asking if arbitration was a satisfactory procedure to resolve disputes. This research updates and extends Brooker's research by investigating empirically, respondents overall opinions of arbitration as a method, over three different sized disputes and also the individual opinions of the two categories of respondent. All show that as the size of dispute increases, the rating of arbitration, as a method, improves. With respect to choosing arbitration, from section 8.3.7, the data from respondents suggests there are ranges of monetary claim and size of dispute, where arbitration has a good chance of being selected. Reynolds suggested that mediation or adjudication were preferred for lower range claims, but did not identify what the range might be. Reynolds also considered that adjudication was the most popular method of resolving construction disputes and that litigation was preferred rather than arbitration, these opinions being obtained from interviews with arbitrators. Brooker investigated respondents' views on the suitability of different methods of dispute resolution over several sizes of monetary claim. Considering a method of dispute resolution suitable is not the same as specifically choosing a method, for clearly, respondents may consider arbitration a suitable method for particular claim values, but may never contemplate choosing it. Despite this difference in focus, the general pattern of Booker's results is similar to those of this research. This research updates and extends that of Reynolds and Brooker by introducing size of dispute as a second variable, in addition to size of claim.

8.7 SUMMARY OF CHAPTER

In this chapter, the suitability of arbitration as a method for resolving construction disputes has been investigated. In addition, respondents' view of which method of dispute resolution they would choose, given variables of amount of claim and size of dispute, enabled assessment of the chances of arbitration being selected. In addition to an overall perspective, assessment of how each method compared with one another was able to be determined. The next chapter deals with interview data which expands or explains phenomena derived from the quantitative data.

CHAPTER 9 INTERVIEWS

9.1 INTRODUCTION

In the previous chapter, arbitration as a method for resolving construction disputes was considered. This was followed by obtaining respondents' views of the circumstances where arbitration might be considered as the method of choice, thereby allowing comparisons to be made against other methods of dispute resolution. This chapter deals with analysing data gathered from interviewees, which provides expansion and clarification of questionnaire data. Interview data was provided by 8 Arbitrator and 6 Lawyer respondents.

9.2 THE METHOD OF ANALYSIS OF INTERVIEW DATA

Collection of interview data was discussed in section 4.11, however this section explains in more detail how the data is analysed. As referred to previously[326], there are answers to some questions where it was considered that there would be some benefit from additional information. The additional information was obtained by conducting interviews. Due to time constraints and the desire of the majority of respondents, all but two interviews were carried out by telephone. Interviews were recorded allowing answers to be transcribed accurately. From the recorded dialogue, the important phrases that contributed to answering the question were highlighted. A code was given to a concept and phrases that had a similar meaning within that concept were put into a category. Social science research data can be complex, bringing out many different codes which can be amalgamated into a number of different categories. With this research however, due to the limited number of possible answers to the questions, single or few codes have been used to form the several categories. Had the usual form of coding and categorising for social science research been carried out, then the information being sort would have been less clear. For example in question 1 for Arbitrators, the categories as shown in Table 9.1 could all be considered as codes to the category of 'causes of the fall in the number of arbitrations'. What has been

[326] Section 4.11

done to produce Table 9.1 is to take, for example, all of the references to the improvements in court procedures or costs relating to court procedures as having the same code, to provide a category for 'Improved cost control in courts with the CPR'. When producing the tables in this section it was considered that this was as good a way as any to show the desired information. In addition the number of respondents referring to a particular category is also shown. Each question has been coded separately, hence code 1 in one question is not the same as code 1 in another question. There are however three common questions for both Arbitrators and Lawyers and the codes and categories are the same for both. In addition to analysing the two groups separately; the three common questions are compared to determine any major difference between the opinions of Arbitrators and Lawyers. Answers to some of the questions reflect not only the opinion of the interviewee, but also their opinion regarding their experience of dealing with others. For example a lawyer (party adviser) not only has their own view, but also a view of how the lawyer on the other side has dealt with the different aspects of arbitration.

9.3 ARBITRATOR INTERVIEW RESPONSES

Each question has been shown in order to enable a better understanding of the responses.

9.3.1 Interview Question 1

Respondents were asked their opinion as to why, when the number of disputes had not decreased since the passing of the AA, the number of arbitrations had declined.

Table 9.1 Interview responses from Arbitrators – question 1

code	category	number
1 adjudication	The introduction of statutory adjudication	6
2 court	Improved cost control in courts with the CPR	2

changes		
3 Cost issues	Due to arbitration being costly and taking too long	2
4 contractual changes	Standard forms of contract changing the default provision from arbitration to litigation	1
5 funding	Lack of money to spend on disputes	1
6 court style	It has become too legalistic and similar to court proceedings	1

The majority of respondents considered that it was statutory adjudication under the HGCRA, which was enacted in the same year as the AA, which has had the major effect on the use of arbitration[327]. As one interviewee said *"people are keen to get disputes resolved in 28 days"*, another that *"arbitration has fallen due to the success of adjudication"*. There were also comments that it was due to arbitration becoming too costly, taking too long and being too legalistic. Improvement in litigation due to the changes in the Civil Procedure Rules where there is more emphasis on cost control and case management. In addition, changes in Standard Forms of Contract where the default position has changed from using arbitration to litigation, were also considered to have had an effect on the use of arbitration. One respondent referred to there not being sufficient money for parties to spend on disputes.

9.3.2 Interview Question 2

According to this research, cost of arbitration is the major negative feature influencing party advisers away from choosing arbitration. This is despite this research also indicating that arbitrators involve party advisers, to a significant degree, in choosing procedures. The question therefore seeks the opinion of interviewees as to why, when party advisers are significantly involved in choosing procedures, costs are not controlled.

[327] Statutory adjudication under the HGCRA as amended, was briefly discussed in section 3.4.4.2

Table 9.2 Interview responses from Arbitrators - question 2

code	category	number
1 party agreement	Arbitrators have to listen to what party advisers want, which may not always be the most cost effective procedures	6
2 winning	Party advisers although initially wanting cost effective methods, the desire to win the case overrides cost saving	6
3 court	The tendency is for advisers to go towards court style proceedings	5
4 short procedures	Party advisers do not like truncated methods	2
5 party obligations	Parties do not conform to s40 AA. party advisers like to have an enormous amount of time to sort matters out	2
6 vested interest	Vested interest on behalf of advisers to prolong process	1

The majority considered that if the parties were in agreement and wanted procedures that the arbitrator considered were not the best cost effective procedures, that the arbitrator would be hard pressed to implement procedures against the wishes of the parties. As an interviewee said *"-- advisers may have settled on procedures that are not particularly suitable and not particularly quick, but there is nothing the arbitrator can do about that"*. If therefore the arbitrator could not engineer the parties to his viewpoint, he would have to go with the parties. A majority also considered that cost remains a big issue due to parties having started off with an intention of using cost effective procedures, ultimately revert to court style proceedings. Whilst court style proceedings under the CPR may now be much improved from a cost point of view, it still remains costly and Arbitrators will not have the same powers of control that a Judge will have. Further actual court costs required to register and proceed with a claim have been substantially increased. Using court style procedures therefore leads to long and expensive dispute resolution. A further reason given for arbitration remaining costly is due to party advisers being concerned that they have to explore every avenue and, as it were, leave no stone unturned, in order to ensure that they win their case. Further they do not like truncated procedures. Two respondents did say

that initially it is difficult for arbitrators, as they do not know as much as the parties about the case and if the p

arties have agreed the procedures, the arbitrator might initially consider them to be satisfactory. One respondent considered that representatives take a lot of time to sort things out and generally parties and their advisers do not comply with s40 AA which is a mandatory provision that parties shall do all things necessary for the proper and expeditious conduct of the arbitral proceedings.

9.3.3 Interview Question 3

With respect to the importance of features for the effective running of arbitration, keeping costs proportional to the claim rates high with Lawyers and Users, however it is, according to this research, considered the least important feature to Arbitrators. The question seeks to understand why Arbitrators hold this view.

Table 9.3 Interview responses from Arbitrators – question 4

code	category	number
1 small claims	It can be difficult to keep proportionality in small claims	3
2 none concern	Not sure that advisers are concerned about proportionality	3
3 difficulty	Arbitrators are in some difficulty if advisers agree to conduct the arbitration in a manner that makes keeping proportionality problematical, as advisers may consider that their rights are being restricted.	2
4 getting right answer	Probably due to arbitrator considering that getting to the right answer was more important than proportionality	1

There was not an answer that was common to a majority of respondents; however difficulty was expressed where small arbitrations are involved. With small arbitrations although there may be a low value claim, the evidence submitted can be considerable and there can be a number of issues, with parties requiring a fully reasoned decision on every issue raised. It was also stated that if advisers agree

the procedures, the arbitrator has to abide by those procedures. Further, that if advisers want to prolong proceedings, then the arbitrator cutting them short might result in criticism and be construed as restricting parties rights. One respondent said "*I have to say although users want proportionate costs, not sure that lawyers are concerned about that*". Another respondent suggested that an arbitrator may take the view that the correct result was more important than proportionality.

9.3.4 Interview Question 4

As part of cost control, the courts now require parties, early in the proceedings, to estimate the cost of their presenting the case and interviewees were asked their opinion of whether this might be incorporated into arbitral proceedings.

Table 9.4 Interview responses from Arbitrators – question 4

code	category	number
1 agree	Overall is perhaps a good idea, but would need to be put to the parties – cannot impose it	8

All consider it a good idea, although some already get cost estimates, but not

necessarily at the beginning of the proceedings. One respondent said that he would put it to the parties and if the right circumstances, would ask for cost estimates. There was also the comment that there is no authority to impose cost estimates, but can be done with party agreement. Several mention that there is the facility of cost capping (limiting recoverable costs – s65 AA) which requires cost estimates in order to allow the arbitrator to make an informed decision. It is noted that this provision of the AA empowers the arbitrator to limit recoverable costs unless both parties agree otherwise.

9.4 LAWYER RESPONSES

Similar to Arbitrators, the questions for Lawyers are shown to enable understanding of the answers. Further the order of the questions is not the same as the order for Arbitrators.

9.4.1 Interview question 1

The research suggested that there were issues with confidence in arbitrators' decisions and the quality of arbitrators. Respondents were asked for their comments.

Table 9.5 Interview responses from Lawyers – question 1

code	category	number
2 Loosing party	A Party having lost a case might blame the arbitrator	3
3 qualifications	Arbitrator not having the right qualifications for the issues involved.	1
1 Lack of confidence	Arbitrators a little detached from the real world	1

There was only one of the interviewees that considered that they had a lack of confidence in arbitrators and this was considered to be that arbitrators were detached from the real world and lacked quality and ability. The remaining respondents did not personally lack confidence in arbitrators, but proffered the possibility that losing parties having put money and effort into a case and having lost where they thought that there was a good chance of winning, may be susceptible to blame the arbitrator for a poor decision. One respondent suggested that there may be cases where the arbitrator may not have suitable qualifications for the particular circumstances of the case and perhaps did not perform too well.

9.4.2 Interview Question 2

Respondents were asked their opinion as to why, when the number of disputes had not decreased since the passing of the AA, the number of arbitrations had declined.

Table 9.6 Interview responses from Lawyers – question 2

code	category	number
1 adjudication	The introduction of statutory adjudication	5
3 cost issues	Due to arbitration being costly	3
4 contractual changes	Standard forms of contract changing the default provision from arbitration to litigation	2
2 court changes	Improved cost control in courts with the CPR	2
5 other methods	mediation	1
6 dissatisfaction with arbitrator	related to quality and ability of arbitrators	1

The majority of respondents considered that it was adjudication that had had the major effect on the use of arbitration. There were also comments that it was due to arbitration becoming too costly. As one interviewee said "*With the costs involved (arbitration) it is difficult to sell to them (parties)*". Changes in Standard Forms of Contract where the default position has changed and also the changes in Court Procedure Rules, both being referred to above, have had an effect on the use of arbitration. One respondent considered that mediation had also had an effect and one respondent considered that it was due to the quality and ability of arbitrators that arbitration was in decline.

9.4.3 Interview Question 3

Interviewees were asked why arbitration was rated considerably lower than some methods that were quicker and cheaper than arbitration, but susceptible to incorrect and unjust decisions, whilst other areas of the research suggested that respondents considered a correct decision was more important than speed of decision and justice more important than saving costs.

Table 9.7 Interview responses from Lawyers – question 3

code	category	number
1 Other methods(specified)	mediation parties control and adjudication quicker and cheaper	4
2 Cost of arbitration	Arbitration is too costly for the benefits that it provides and those benefits are not sufficient to outweigh the costs	2
3 Other methods(unspecified)	they just prefer the other methods	2
4 variability	dependent on size of claim	1
5 dissatisfaction	Not sure that one gets justice with arbitration	1

There was not one reason alone that a majority of respondents considered why the correctness and justice of arbitration had not improved its position against those methods that may not supply the same degree of correctness and justice as arbitration. One reason given was that although justice and correctness was likely to be greater with arbitration than with adjudication and mediation, the much greater cost of arbitration outweighed what benefits it might provide. As some respondents said, the parties would sooner get a quick and speedy decision, which if wrong they were likely to live with it and move on. There was reference to mediation allowing the parties to be in control, rather than being given a decision by a third party, although one interviewee cautioned that if a party had a genuinely watertight case, none the less, that party would have to compromise if agreement was to be reached with mediation. Another interviewee considered that it was dependent on the size of the claim in that if it is a large claim it was more important to get a correct and just decision with the cost being of less importance. If however the claim was small, then huge costs may not be justifiable. One interviewee considered that arbitration might not produce justice in any event.

9.4.4 Interview Question 4

According to this research, cost of arbitration is the major negative feature influencing party advisers away from choosing arbitration. This is despite the

research also indicating that arbitrators involve party advisers, to a significant degree, in choosing procedures. The question therefore seeks the opinion of interviewees as to why, when party advisers are significantly involved in choosing procedures, costs are not controlled.

Table 9.8 Interview responses from Lawyers – question 4

code	category	number
3 court	Party advisers generally prefer to use court style procedures	6
2 winning	Party advisers do not know where to draw the line; no stone unturned; winning is more important than costs to advisers	4
1 party agreement	Party advisers agree between themselves the procedures and the arbitrator is in difficulty if he disagrees with those procedures	3
5 vested interest	There is a vested interest in running up costs	2

Party advisers tend to prefer court style proceedings as these are what are familiar to them and lie within their comfort zone. This general opinion was captured by one interviewee who said "*A lot of advisers treat arbitration as if it were litigation -- well if you do that it will take a long time and cost a lot of money*". Further if parties agree on procedures, then the arbitrator is in some difficulty to change them, even if they are not the most cost effective procedures for the circumstances of the case. Therefore whilst parties are involved with determining the procedures, they may not be features that reduce cost and duration of arbitration. Two interviewees suggested that some Party advisers may be influenced by a need to generate fees to meet targets. It was also suggested that for some party advisers winning was the most important factor, even if this increased the costs substantially. This was put very succinctly by one interviewee "*Advisers are generally far more interested in winning than they are of costs – why would they go a quick route when they can go a long route and generate more fees*".

9.4.5 Interview Questions 5

Limiting the duration and cost of arbitration rated highly as important features for the effective running of arbitration. With this in mind, interviewees were asked why limiting features, such as limiting disclosure of documents, the number of witnesses, both expert and of fact, the time allowed to present their case and limiting recoverable costs, all of which should help reduce duration and cost, were rated at a low level.

Table 9.9 Interview responses from Lawyers – question 5

code	category	number
1 vested interest	Vested interest - – you have to hit the targets	3
2 +insincerity	They say that they want time and cost controlling, but do not take the steps to enable this to occur. Paying lip services to the fact that time and cost are important	3
3 retain control	Advisers see any reduction in procedures as compromising their position	1

Again the question of party advisers having a vested interest was suggested as a reason why they considered the limiting features as low priority. It was suggested that whilst party advisers might want time and cost controlling they do not actually take the necessary steps to bring this about and that it is only lip service. It was also considered that limiting features are considered by some as limiting their rights. An interviewee considered that the limiting features could be incorporated into arbitration "*All of the features in the question could be adopted into arbitration – but it would take a strong arbitrator and it needs cooperation of the party advisers"*.

9.4.6 Interview Questions 6

As part of cost control, the courts now require parties, early in the proceedings, to estimate the cost of their presenting the case and interviewees were asked their op+inion of whether this might be incorporated into arbitral proceedings.s

Table 9.10 Interview responses from Lawyers – question 6

code	category	number
1 agreement	A good idea, but needs some flexibility to accommodate genuine changes in the case and no authority to impose it	5
2 disagreement	This can be an absolute horror, left with a cost budget that is inadequate	1

All but one interviewee considered that implementing cost estimates would be acceptable in arbitration, although there was some concern that there had to be more flexibility than in the courts. There were comments that it would focus the mind on the matter of costs and that parties would know the costs that they would be subjected to. It would however require an amendment to the AA for the arbitrator to impose such an action unilaterally, but could be achieved by agreement of the parties. One respondent considered it to be a wrong consideration as it can result in a cost budget being inadequate, resulting in a successful Party being denied costs that exceeded the cost estimate.

9.5 COMPARING LAWYER AND ARBITRATOR RESPONSES

As referred to previously, there are three questions that are common to both Lawyers and Arbitrators. With regard to the question relating to the number of arbitrations falling, but the number of disputes not falling, both categories of respondents considered the major reason for the decline in arbitration is due to the introduction of statutory adjudication under the HGCRA. In addition both Arbitrators and Lawyers consider that the cost of arbitration, the change in the default position with Standard Forms of Contract and the improvements in the Civil Procedure Rules also have had an effect.

With respect to the involvement by party advisers in choosing the procedures for arbitration, whilst the cost of arbitration is the most influential negative reason against choosing arbitration, there was again some common ground between the two categories of respondents. Both considered that Party representatives preferred to use court style procedures and that if the parties had agreed procedures, then it was difficult for the arbitrator to change those procedures should the parties not want a change. In addition the desire to win the case becomes more important than the control of costs.

With regard to using cost estimates early in the proceedings, this was considered by all but one interviewee to be a reasonable idea. There was concern that the system, if used, would need to be flexible enough to allow amendments where there are justifiable reasons for doing so. Further that there was no authority for an arbitrator to implement cost estimates unilaterally.

9.6 SUMMARY OF CHAPTER

In this chapter the views of respondents has enabled a better understanding of why arbitration is in decline and the factors influencing duration and cost of arbitration. This additional information can now be incorporated into the discussion of findings from other areas of the research, giving a more extensive explanation of the issues affecting construction arbitration.

CHAPTER 10 DISCUSSION

10.1 INTRODUCTION

Chapters 5, 6, 7 and 8 dealt with the analysis of quantitative data derived from the questionnaires, whilst chapter 9 dealt with analysing the data from interviews. In this chapter, the findings from the different chapters are integrated where appropriate to give a more holistic interpretation and discussion of the research questions asked.

10.2 DISCUSSION ON THE USE OF ARBITRATION AND THE EFFECT OF OTHER METHODS OF DISPUTE RESOLUTION

Two separate time periods were investigated in order to determine the trend in the use of arbitration, which also provided respondents' views of the extent of the use of arbitration during those periods. The periods were 2008 to 2013[328] (the first period) and 2002 to 2007 (the second period). The inference from the research is that there has been a significant decline in the use of arbitration in both periods[329]. During the more recent time period the reduction is less than that of the previous time period. There has therefore been a reduction in the decline in the use of arbitration for construction disputes for the more recent period, compared to the previous period. The research by Reynolds[330], whilst referring to arbitration generally, indicated a similar result, although he considered that decline had "*bottomed out*", whereas this research suggests that the decline in the use of arbitration remains significant.

Whether there had been a reduction in the number of disputes since the passing of the AA[331], was also investigated, as a reduction in the number of disputes might be considered the cause of a reduction in the number of arbitrations. This aspect

328 2013 was the year that the questionnaire data was collected.
329 Sections 6.4.1 and 6.4.3
330 Section 3.4.1
331 Section 6.5

was investigated[332] using data from all three categories of respondent, which resulted in a significant number of respondents considering that there had not been a reduction in the number of disputes since the AA came into force in 1996. It can therefore be inferred that the reduction in the number of arbitrations for both periods referred to above is not due to a reduction in the number of disputes.

When considering arbitration and its decline, it is important to determine how arbitration is rated as a method for resolving construction disputes. If, for example, arbitration was rated extremely low, this in itself would provide a valid reason why arbitration has declined. The analysis of questionnaire data from combined Lawyer and User respondents, suggests that as a method of dispute resolution, arbitration is considered to be approximately neutral[333], between poor and excellent. It can be said therefore, that arbitration is not excessively poorly rated, but clearly the rating observed indicates that arbitration is not at the top of the list when considering the method of resolving construction disputes. The rating does improve as the size of the dispute increases, however even for large disputes the rating is only a little over neutral. Further, Lawyers and Users had a similar rating for small disputes, but for medium and large disputes Lawyers gave a higher rating than Users[334]. Brooker investigated respondents' views on the suitability of arbitration as a means of resolving construction disputes, with similar results to the overall results for this research. Despite the fact that Brooker's research was carried out in the late 1990's, the view of arbitration as a method, appears not to have changed to any great degree.

Having found that construction arbitration is in significant decline, together with arbitration as a method for resolving construction disputes being only at neutral level, there remains a question as to whether arbitration has any place in the dispute resolution world. The study therefore investigated where respondents might consider arbitration suitable as the first choice method for resolving

[332] Section 6.5
[333] Section 8.2.3
[334] Section 8.2.2

construction disputes, compared to choosing any one of the other methods of dispute resolution included in this thesis. In addition to the choice of method, there were variables of size of monetary claim and size of dispute[335]. The overall result, including all sizes of claim and dispute, for arbitration being selected by respondents as first choice was 151 times out of a possible 1304 times (had arbitration been chosen for every possible case), being 11.58%[336]. This percentage is surprisingly low at first glance, however, no one method achieved more than 31%[337]. The overall, low, first choice percentage is reflective of a declining market and a not particularly high rating as a method. A review of the literature did not reveal any empirical data as to the extent that arbitration might be considered a first choice option that could be compared with this finding.

When assessing the frequencies for arbitration, as the first choice, for the different claim values and size of dispute, they increase considerably for values over £200,000 with 89% of all scores for arbitration being for this figure or above. Further, 70% of all scores are for values over £1 million[338]. When considering all of the methods for all sizes of claim and dispute, with small and medium disputes, for the value of claim £1 million to £10 million range, there is no significant difference between the frequencies for arbitration and the other methods, save for expert determination which is considerably lower[339]. This therefore infers, contrary to what was apparent from the overall result, that respondents consider arbitration as having a similar standing to litigation, statutory adjudication and mediation as a first choice method in this monetary range. For claims over £10 million litigation has the highest score in all sizes of dispute, indicating that it has a better standing than the other methods, however arbitration frequencies are better than adjudication and similar to those of mediation in this monetary range. The value of claim therefore is a factor influencing the choice of arbitration, although the size of the dispute does not have a significant influence. There was nothing revealed in the literature in respect of these results.

335 Sections 8.3.2 – 8.3.4
336 Table 8.3
337 Table 8.3 to the nearest whole number Litigation 24%, Statutory adjudication 30%, Mediation 31% and Expert determination 3%.
338 Tables 8.4, 8.5 and 8.6
339 Section 8.3.5

The overall results, according to respondents, are substantially affected by the popularity of adjudication and mediation for values under £1 million for all sizes of dispute and to a lesser extent, the popularity of litigation for values over £10 million[340]. Arbitration is therefore, squeezed between adjudication and mediation at the lower level of claim and litigation at the higher level of claim and this is clear evidence of a causal effect on the decline of the use of arbitration and discussed in more detail in the section below.

10.2.1 The effect of other methods on the use of construction arbitration

With respect to the quantitative data, the reasons given by those respondents who would not generally choose arbitration, mainly centre on other methods being quicker, cheaper and less complex than arbitration[341]. Most interviewees considered that adjudication was the major reason for the decline in arbitration[342] and as the literature shows, statutory adjudication under the HGCRA, as amended, has increased adjudication's popularity greatly[343]. This research however indicates that adjudication's major popularity is for claim values under £1 million. Adjudication does have an advantage for a disputing party that considers that they are getting nowhere with negotiations in that they do not require the agreement of the other party to start adjudication proceedings. Arbitration cannot compete with this feature of adjudication as arbitration is a consensual process. The other factors of adjudication that contributes to its popularity are that it is relatively cheap, quick and the courts are supportive of adjudicators' decisions. This latter point was made evident from the first court case involving statutory adjudication under HGCRA[344]. In this case Mr Justice Dyson recognised the limitations of statutory adjudication, but referred to Parliament being aware of the limitations; he therefore upheld the decision of the adjudicator. Evidence from interviewees suggests that parties, despite the possibility of receiving a decision against them that they may not be satisfied with, are likely to risk adjudication

340 Tables 8.4, 8.5 and 8.6
341 Section 8.4
342 Sections 9.3.1 and 9.4.2
343 Trushell, I.,Milligan, J.L. and Cattenach, L.H. (2012) ob. cit.
344 *Macob Civil Engineering Ltd. v Morrison Construction Ltd.*[1999] All E.R. 143. *Carillion Construction Ltd. v Devonport Royal Dockyard Ltd* [2005] EWHC Civ. 1358. Para. 14

rather than go to the expense of arbitration[345]. The literature indicated that arbitration was too slow and expensive[346]. Lawyer and User respondents in this research[347] also considered arbitration to be too slow and expensive. Further, analysis of arbitrations carried out by Arbitrator respondents[348] is also consistent with this view. Duration and cost of arbitration therefore remains a problem. Whilst it is not suggested that arbitration could replace adjudication to any large extent for values under £1 million, arbitration could, by improving matters relating to time and cost of the process, make it more competitive. This would be advantageous for arbitration and particularly so where the matters in dispute are complex, making the adjudication timescale of 28 days (42 days if agreed extension of time) less suitable.

Mediation retained relatively high scores from respondents over all sizes of dispute and all values of claim, however it was only in the values under £1 million where respondents considered it far more popular than arbitration. Interviewees suggested, it was the parties being in control of the dispute that made mediation a better option than arbitration[349]. As referred to previously[350], the CPR requires the parties to try to resolve their dispute before trial and this is generally considered to be by using mediation. Further, mediation would be considered to be quicker and cheaper than arbitration. These are considerable advantages in favour of mediation, however as one interviewee made comment[351], a party with a very good case will have to compromise for settlement to be achieved. With mediation therefore, a party must be prepared to forgo some of its claim that they consider sound. For arbitration to compete with mediation for claim values under £1 million, it would have to be more efficient with respect to duration and cost.

345 Section 9.4.3
346 Section 3.2.3
347 Sections 6.6.1.2
348 Sections 5.3.2 and 5.3.3
349 Section 9.4.3
350 Section 3.4.4.1
351 Section 9.4.3

Reference was made by several interviewees to the fact that improvements in the CPR have made litigation more cost effective and that this process is ongoing[352]. Further, litigation is the process in which Lawyers are trained and they naturally prefer a process that provides familiarity[353]. If arbitration cannot provide a more cost effective and efficient process, then it is likely that it will fall further behind litigation. The implementation of new court fees[354], which have substantially increased, does make court action more expensive and whilst it may have an effect on smaller claims, the fee for a claim of £1 million is £10,000 being 1% of such a claim and may be considered as a small part of overall costs. Court fees may well have an influence on choosing litigation, but it is more likely that this will benefit adjudication and mediation rather than arbitration, unless parties are willing to use expedited methods of arbitration[355], or make arbitration more cost effective.

10.2.2 Future use of arbitration for construction disputes

Both Lawyers and Users were asked whether they would advise/use arbitration again[356]. Having regard to the combined figures of Lawyers and Users, a significant number, beyond $p < .001$, would use arbitration again. Individually there was little difference between Lawyers and Users with 74% and 73% respectively saying that they would advise/use arbitration again. Therefore, despite the generally poor results for arbitration being the first choice of method, the evidence suggests that respondents, to a significant degree, would consider using arbitration in the future. Further, it would not be unreasonable to infer that this may particularly apply to those claims between £1 million and £10 million, where arbitration frequencies are not significantly different to those of the other methods.

352 Sections 9.3.1 and 9.4.2
353 Section 9.4.4
354 www.gov.uk/make-court-claim-for-money/court-fees the details show the scale used to determine the court fee payable
355 Section 2.5.4.1
356 Section 8.5

10.3 FEATURES OF ARBITRATION AND THEIR EFFECT ON CHOOSING ARBITRATION

Those features that respondents consider have a positive or negative effect on their decision to use arbitration is important data as it identifies where arbitration might be considered strong and where weak. This brings about a better understanding of arbitration and identifies where arbitration might benefit from improvements. Brooker and Reynolds concluded that duration, cost and the adversarial approach were negative influences against using arbitration. In addition, Reynolds said that there was a lack of quality and skill with arbitrators, but did not define what that actually meant. Complaints prior to the passing of the AA[357] were identified in the literature and these can be considered as negative influences. These features are cost and duration of arbitration, being too much like litigation, the law of arbitration being too complex and too much court intervention. There are however many more factors influencing the use of arbitration for construction disputes and these have been considered in this research.

The analysis of the quantitative data is shown in Chapter 6. Considering the combined data for Lawyers and Users, there are 12 positive and 12 negative features. Table 10.1 shows the results of the data, with the features being in order of the importance of the positive[358] or negative[359] effect of that feature on the choice of arbitration.

Table 10.1 Positive and negative features affecting choice of arbitration

Positive features	Negative features
1. the award is binding	the cost of arbitration
2. the process is private	there is a lack of confidence in arbitrators decisions
3. reasonable opportunity to present case	delay, unavailability of party advisors
4. reasonable opportunity to deal with other parties case	complexity of procedures used
5. parties are able to choose the arbitrator	first choice arbitrator often not available

357 Section 2.3
358 Table 6.8
359 Table 6.9

6. procedures of arbitration are flexible	delays unavailability of the arbitrator
7. winning party get their costs	it is too much like litigation
8. decisions provide justice between the parties	lawyers reluctant to depart from court style procedure
9. procedures can be tailored to suit case	lawyers fees a substantial part of overall cost
10. parties can influence procedures chosen	too adversarial
11. appeals against the award are severely limited	lawyers prefer adversarial approach
12. Parties can agree to exclude appeals on errors of law	complexity of arbitration law

Identifying the positive and negative features influencing the choice of arbitration was required to answer Research Question 1; however what the results imply is also important. With respect to positive features, other than arbitration awards being binding, private and appeals against decisions being difficult to succeed, the arbitrator and party representatives (Lawyers) can control the other positive features. The result of principal component analysis suggests that the positive features can be summarised as a private process, providing fairness, control of the process and an award that is final[360]. It is for the arbitrator and the lawyers representing the parties to ensure that the procedures of arbitration have due regard to these positive features. As these features are already considered as having a positive effect on choosing arbitration, a detailed examination is not necessary. It is the negative features that are the more important factors to consider, as these are the ones that impact on the decision not to use arbitration and therefore influence decline. They therefore need addressing in more detail and are dealt with individually immediately below. These negative features should therefore be of interest to arbitrators and Institutions connected with arbitration. As cost and duration of arbitration are reflected in many areas of the research, these will be dealt with under a separate head in section 10.5.

10.3.1 Confidence in arbitrators' decisions

Respondents were asked to rate to what extent lack of confidence in arbitrators' decisions influenced their choice of arbitration. A lack of confidence would also

[360] Section 6.6.2.1

indicate a possible cause of decline in the use of arbitration. The mean of the answers, having regard to the 7 point scale, was 3.02 for Lawyers and 3.63 for Users, indicating a category level of 1 below neutral for Lawyers and neutral for Users (to the nearest whole number)[361]. There was the facility for respondents to comment in the questionnaire, but there were none that were useful in assessing what the problems were. Interviews[362] shed little additional light on the subject as only one out of those prepared to give an interview held such an opinion. That interviewee considered that arbitrators lacked quality and were a little detached from the real world. Other interviewees, who did not lack confidence in arbitrators, suggested that dissatisfaction can occur when a party loses when they thought that they had a winning case, or where an arbitrator lacked the proper qualifications for the particular dispute[363].

Having regard to the size of the means of the distributions[364], both Lawyers and Users show that there is some dissatisfaction, although the degree is not excessive. Nonetheless, the indications are that it is perceived by respondents that improvements with arbitrators' decisions are required. This research has not identified the actual problem, or problems, and it is a matter that requires further investigation. Reynolds[365] in his research also referred to there being some dissatisfaction due to lack of quality and skill of arbitrators, however there was not any detail in his analysis.

10.3.2 Delay issues

There are three types of delay which are referred to as negative features, these are: (i) possible delays due to first choice arbitrator not being available; (ii) delays of the arbitral process due to the unavailability of legal representatives and (iii) delays of the arbitral process due to arbitrator unavailability. All have some

[361] In addition, 3.63 were found not to be significantly different to the hypothetical mean of 4.
[362] Section 9.4.1
[363] Section 9.4.1
[364] Sections 6.6.3.2 Table 6.13 and 6.6.4.2 Table 6.15
[365] Reynolds (2014) ob cit p.31

common elements. According to background data of Arbitrators[366], there is little difference in the number of arbitrators appointed by parties/lawyer advisers and institutions, although there are slightly more of the latter. Where arbitrators are approached by parties/advisers, there is no control on the initial availability, the first choice arbitrator will either be available or not. Where institutions are used, if the parties advise a preference for a particular arbitrator, again the preferred arbitrator may not be available. If the first choice arbitrator is not available, then delays can only be avoided by accepting someone other than their first choice. Arbitrators who have been engaged to conduct the arbitration and lawyer advisers engaged to represent a client are likely to have some difficulty in organising themselves, particularly for attending face to face meetings. It is however important, in the interest of avoiding delays, that having taken on the task of conducting, or being a representative in a particular arbitration, there is not over subscription to alternative work that will substantially affect availability. This may be difficult for prospective arbitrators, or advisers, who are extremely busy and have a known future workload of considerable proportions. However, if by taking on a new arbitration it would be clear that any hitches in the process would result in delays, then it is questionable, in light of the concerns of respondents, whether the appointment should be accepted. The London Court of International Arbitration has tried to resolve the arbitrators' availability by requiring a written and signed declaration by the potential arbitrator that they are "*ready, willing and able to devote sufficient time, diligence and industry to ensure the expeditious and efficient conduct of the arbitration*"[367]. This is a possible solution to the availability problems of arbitrators and could be extended to users when instructing their lawyers. It would not be a complete resolution of the problem, as not everything is foreseeable and not everyone is forthright in their assessments, but it may well avoid much of the delay due to availability problems. In the event that possible delays are foreseeable and discussed with the parties, if they accept the situation, then it is their decision to accept that there may be delays.

366 Section 5.3.5
367 London Court of International Arbitration, Article 5.4

10.3.3 Complexity of procedures and arbitration law

As a negative issue against using arbitration, procedures do not appear to be a particular problem to Lawyers who list it as the least important of the negative factors considered[368]. In contrast, Users have this at the top of the list of negative features[369]. Party autonomy under the AA[370] allows parties to have whatever procedures they wish, subject to matters of public interest. If parties agree procedures through their lawyers, it is difficult to perceive that there would be any difficulty in understanding the procedures, as it is they who have agreed them. If agreement cannot be achieved, it becomes the responsibility of the Arbitrator to adopt suitable procedures[371]. If using Institutional Rules, procedures are laid down. A significant number of Arbitrator and Lawyer respondents confirmed that there was liaison between them in deciding procedures to be used[372]. Lawyer respondents were asked the extent of their consultation with their User clients on the matter of procedures and a significant number said that they involved Users in the procedures process[373]. There was some difference between the opinion of Lawyer and User respondents regarding the degree of consultation and the data suggests that the consultation might not be as great as thought by Lawyers. Further, if Institutional Rules are used, or the decision passes to the arbitrators to determine the rules, they may not be understood to their full extent. It would appear therefore, that in these circumstances it is a matter of education and those responsible for courses should be required to ensure that procedures of arbitration for the different rules that are available, are part of the curriculum. If ad hoc rules are made between the parties, there does not appear to be any reason why they should not be fully understood, at least by Lawyers.

With respect to the law governing arbitration, although this falls under a negative influence against choosing arbitration[374] for both Lawyer and User respondents, this issue is not significantly different to the hypothetical mean of 4. It follows that,

368 Section 6.6.3.2
369 Section 6.6.4.2
370 AA s. 1(b)
371 AA s.33(1)(b)
372 Section 7.4.1
373 Section 7.4.2
374 As the means for both Lawyer and User lie below the neutral value of 4.

in effect, the law of arbitration is considered by respondents as neither positive nor negative with respect to its influence on choosing to use arbitration.

10.3.4 Reluctance of Lawyers to depart from court style proceedings and being too confrontational

Arbitrator respondents were asked to what extent Lawyers were prepared to depart from court style proceedings[375]. With respect to small arbitrations 25(76%), (mean of distribution 5.48) Arbitrator respondents considered that Lawyers were prepared to depart from court style proceedings. This perceived perception of willingness decreases to 17(53%) (mean of distribution 4.69) for medium sized arbitrations and still further for large arbitrations 12(35%) (mean of distribution 3.82). It is clear from these results that as the size of the arbitration increases, so does the perceived willingness to depart from court style proceedings decrease. However, both Arbitrator and Lawyer interviewees considered that Lawyers lean towards court style procedures, with 11 out of 14 of interviewees holding this view[376]. Whilst no specific reason for this tendency was given by interviewees, it is most likely due to the familiarity that Lawyers have with court procedures and its adversarial nature, as this is part of their training. It is therefore likely that Lawyers do tend towards court style procedures to a greater extent than would be suggested by the quantitative data. Further, interviewees implied that court style proceedings generally are a cause of increased cost of arbitration[377]. If court style procedures are used for arbitration, then Lawyers and Arbitrators need to ensure that those elements that are conducive to causing delay and thereby increasing cost, are kept under strict control. As was said by one interviewee "- - - *then they get that they (lawyers) have to explore every single possible avenue*". It should be borne in mind that the AA refers to a party being given a '*reasonable opportunity of putting his case and dealing with that of his opponent'*[378]*.* As referred to by the DAC in their explanation of this part of s.33, that it did not mean a full

375 Section 7.6.1
376 Sections 9.3.2 and 9.4.4
377 Section 9.4.4
378 Arbitration Act 1996 s.33(1)(a)

opportunity[379]. This, in essence, means that “no stone unturned”, which is applicable to litigation, should not be the mantra when arbitrating.

Additionally, Users clearly indicate that the confrontational approach by Lawyers is a factor that has a negative effect on their perspective of arbitration[380]. If the confrontational element that is seen in the courts, particularly in cross examinations, could be modified or contained, which would need the cooperation of party lawyers and the arbitrator, then court style procedures might become less traumatic, particularly to witnesses of fact, who may not have had any previous experience of cross examination. It is also noted that mediation, which according to respondents had the widest popularity[381], is unlikely to be confrontational, hence arbitration could learn from this.

10.3.5 Lawyers’ costs

Costs of Lawyers is of particular concern to Users, however this would be partially remedied if the arbitral process was more efficient and less costly. Several Lawyer interviewees referred to advisers initially agreeing to control costs, but driven by the urge to leave no stone unturned: - revert to abandoning cost control[382]. As referred to above, it was the intention of the AA to provide for a reasonable opportunity to deal with the case. Therefore, if Lawyers’ costs are to be kept to a reasonable level, the notion that arbitration is to be like the old style court hearings needs to be abandoned, as this can only lead to Lawyers costs remaining high. Some interviewees expressed the opinion that costs are sometimes made high due to vested interest in producing fees[383].

379 Departmental Advisory Committee on Advisory Law Report on the Arbitration Bill (1996) para.165. Published by HMSO
380 Sections 6.6.4.2
381 Section 8.3.1 Table 8.3
382 Sections 9.3.2 and 9.4.4
383 Sections 9.3.2 , 9.4.4 and 9.4.5

10.4 FACTORS CONTRIBUTING TO EFFECTIVE RUNNING OF ARBITRATION

The rating of factors for effectively running arbitration is important as it identifies the extent of importance respondents hold those features. The combined data for all three categories of respondent indicated that duration and cost were the most important features for effectively running arbitration. Respondents considered those features that influence the allocation of costs, the early determination of what is being claimed, the early determination of the issues of the dispute and how the claim would be proven, as important features of arbitration. These are all features that have a substantial influence on reducing cost and duration; hence their perceived importance. However, there were eleven and eight features that Lawyers and Users respectively, rated of low importance. The features considered by Lawyers and to a lesser extent by Users, as of lower importance, are mainly features that limit what a party can do within the arbitral process. Clearly, the nature of a particular case would influence the extent of the use of any limitations incorporated into the procedures, as parties would need to be able to deal with their case and that of their opponent in a proper manner. Having limitations applied to procedures of arbitration does not automatically mean that a party is prejudiced. If arbitration is to become quicker and cheaper, then every effort needs to be made to incorporate, wherever possible, procedures that go towards these goals. A brief examination is made of the features rated as of lower importance by respondents. It is noted that some of the features below fall into the top 10 most important features as determined by the combined data[384], however this is due to influence by an individual category of respondent having a high mean.

Keeping cost proportional to the claim is an important matter as clearly incurring costs that are much greater than the claim itself is far from ideal. This may be problematic with small claims[385], as a process has to be gone through, irrespective of the amount of claim. It is however important to have regard to the value of the

[384] Table 7.1
[385] Section 9.3.3 Table 9.3

claim and unless there are circumstances that cannot be avoided without causing prejudice to one of the parties, keeping costs proportional should be considered as important. With respect to the use of expedited methods, as the words imply the procedural process is shortened. The extent depends on the rules adopted and all institutions have expedited methods. These methods are not investigated here as that would take considerable space and the salient matter is that such processes exist and could help reduce duration and cost of arbitration. Early determination of issues, and early submission of how the claim is to be proven, both have the potential of reducing duration and costs. Determining the issues is vital such that each party knows exactly what the dispute is about. Avoiding making clear the issues, wastes time, with parties going back and forth, as in shuttle diplomacy, until what it is the parties are disputing is finally determined. Further, knowing what is actually being claimed may help the parties to settle. How the claim is to be proven has a similar effect in that bluffs can be more readily avoided. Early submission of the law to be relied upon is also a matter that can influence the resolution of the dispute. Not limiting the number of witnesses of fact where there are different witnesses that provide virtually the same facts as one another can consume time without any practical benefit to the arbitration. This matter can be determined from witness statements. A similar comment applies to limiting the number of expert witnesses. A party with large funds can try to overwhelm the other party by producing a number of expert witnesses. Limiting the amount of time for parties to present their cases at a hearing can be very beneficial in as much that it restricts presentations that are big on word count, but small on substance. Further, any time limits would have regard to submissions by the parties to the arbitrator, who would consider the submissions before imposing time limits and should not impede justice between the parties. Limiting the amount of costs that a party can recover, can be an important method of controlling costs, as it influences parties against pursuing issues where there is little chance of success. Further, it is of some help in the situation where parties are of unequal standing. For example, a party with no monetary problems can, by delaying or pursuing unmeritorious claims, result in the less wealthy party, who having a good claim or defence, has to agree to terms that otherwise they would not agree to, other than to avoid the possibility of being subject to excessive costs should they lose. Using procedures that depart from litigation, With respect to litigation, whilst

the current trend in the courts is for better management in controlling time and costs, it is doubtful that arbitrators would be recognised by lawyers as having the same authority as a Judge. As one interviewee stated in a passing remark, “if a Judge refused to agree to a particular request, even if the lawyer did not like it, they would likely accept the ruling, but if the same circumstances occurred with an arbitrator, then the lawyer is likely to shout “injustice”. It is quite possible for arbitration to follow general court style procedures, however restrictions of procedures imposed by arbitrators would need to be readily accepted by lawyers and not considered as a restriction of rights, as referred to by an interviewee[386]. There is ample clarification in the AA that procedures do not have to follow court procedures, allowing the arbitrator to investigate himself[387], if he thought that it would be the most appropriate way forward. The parties can agree not to let this occur. The limitation of documents is a feature that provides a restriction on the amount of documentation that a party has to provide to the other party and can be onerous if unfettered. The cost can be considerable and not only includes searching for documents, but also copying and delivering them.

There are therefore a number of features that both Lawyers and Users attach a lower level of importance and will be less inclined to incorporate into the procedures. These features do have a considerable influence on the time and cost expended in arbitrating, however they are generally restrictive and it appears from this study that Lawyers in particular prefer not to be restricted by these features[388]. As referred to previously, the DAC advised that arbitration should provide for a reasonable opportunity for parties to present their case, however, the indications from the above suggests that Users and particularly their Lawyer advisers may not be prepared to take the steps to reduce the time and cost of arbitration.

There are nine features of arbitration where there is a practical significant difference between Arbitrator respondents and either Lawyer or User respondents

386 Section 9.4.5 Table 9.9
387 AA 1996 s.34(2)(g)
388 Section 9.4.5

of their opinion of the importance of those features for the effective running of arbitration[389]. It is arguable that significant differences in the perception of importance of features, may lead to additional time and cost being incurred in reaching agreement. Further, parties and their advisers are less likely to vigorously pursue features that are of lower importance to them as indicated by the lower means, referred to above. Those procedural features where there is a significant difference of their importance and also subject to having a low mean, may take even more time to agree. It is difficult to assert that these matters alone would cause conflict sufficient to cause Lawyers and Users not to use arbitration. There are however, 13 out of 19 features where there may be some difficulty in reaching agreement, resulting in additional submissions and possibly additional interlocutory meetings, thereby increasing duration and cost of the process.

Other issues discussed in chapter 7 regarding their influence on arbitration and its effectiveness are dealt with in other areas of this chapter. This is due to their attachment to other arguments and providing modification, or a more holistic view of those arguments.

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10.5 COST AND DURATION OF ARBITRATION

The AA provides for a very wide facility to implement procedures that allow costs and duration to be controlled[390]. Further the AA provides for party autonomy[391]; hence the parties and their advisers are in a position to ask arbitrators to implement procedures that control duration and cost. Importantly they are not limited to those procedures specifically referred to in the AA and can be any suitable procedure that fits the circumstances of the case, other than a procedure that is against Public Policy. In effect therefore, the AA opens up the opportunity to control duration and cost by any suitable method. Moreover, arbitrators have a

389 Section 7.3.3
390 Section 2.5
391 Arbitration Act 1996 s.1

mandatory obligation to control duration and costs[392] and parties also have a mandatory duty to assist in the expeditious conduct of the arbitration[393].

Despite the provisions in the AA, as referred to above, cost of arbitration is the most important negative feature influencing respondents away from arbitration[394], with cost and duration being the most important features for the effective running of arbitration[395]. How long arbitration takes will generally have an influence on the cost of the arbitration and in respect of the data provided for this research, it indicated that there was a significant relationship between duration and cost[396]. However, this investigation also found that the speed of conducting the arbitration is not the overriding factor should it jeopardises getting the correct decision[397]. Further, respondents considered getting a decision that provided justice between the parties was more important than saving costs[398]. User respondents' opinion as to whether it is better to get the full amount claimed (assuming a justifiable claim) rather than compromise on the time to achieve it, even if it will consume a lot of time to achieve it[399], showed that the majority (52.2%) would go for the full claim. There was a sizable minority (29.5%) of the opposite opinion. Therefore whilst duration and cost are matters that need addressing, getting the correct decision and providing justice between the parties have to be borne in mind. Generally Users are likely to pursue a justifiable claim, even if this involves more time and cost.

Cost clearly is a factor that restricts the use of arbitration. Interviewees suggested that whilst justice and correctness of decisions are more likely to be achieved with arbitration than with adjudication and mediation, the sheer cost of arbitration compared to adjudication and mediation outweighs whatever benefits that

392 Arbitration Act 1996 s.33
393 Arbitration Act 1996 s.40(1)
394 Section 6.6.1.2
395 Section 7.3.1
396 Section 5.3.3
397 Section 7.7.1
398 Section 7.7.2
399 Section 7.7.3

arbitration might provide[400]. Further, it was suggested that the degree of justice and correctness of decision with arbitration is not sufficiently better than adjudication and mediation to overcome the cost of arbitration. One interviewee suggested that it was a matter of the size of the claim[401] and that getting justice and a correct decision was more important with large claims, where the sums involved really have a commercial influence on a company should they receive an unjust or incorrect decision. In such a circumstance, the cost is not the main issue, whereas the cost of recovering a small sum is very much an issue.

In respect to the time taken to complete arbitration, the data from arbitrator respondents[402] indicated that the average time for arbitration is 48.9 weeks, with the median being 39 weeks. A little over one third (34.3%) took up to 6 months and a little over two thirds (68.7%) up to 12 months. Clearly, having regard to Arbitrator respondents in this research, arbitration is a slow process. This is particularly so compared to adjudication under HGCRA, as amended, where, according to Milligan *et al,* 80% of adjudications are decided within 42 days[403]. Regarding the cost of arbitration, Arbitrator respondents were asked for data on the cost of the arbitrations, not including their own fees, which they have been involved with. There were only 15 responses as several said that the parties had settled costs themselves, whilst some could not remember, despite the low number of responses there is some guidance as to cost[404]. The mean of the costs was £418,000, however, one of the costs was £5,000,000, which had a substantial effect on the mean. If the median is considered, this would put the cost at £60,000. These data confirm that arbitration generally consumes a great deal of time and costs can be high.

400 Section 9.4.3
401 Section 9.4.3
402 Section 5.3.2
403 Section 3.4.4.2
404 Section 5.3.3

This research found there had been a significant decline in the number of arbitrations[405] in the past 10 years; the trend is towards a slowdown in the decline[406]. If this trend is to continue, then cost and duration of arbitration must be controlled. Reference was made in section 8.3.5 to arbitration having scores for first choice of method for small and medium size disputes being comparable to litigation, adjudication and mediation for claims between £1 million and £10 million. Cost and duration issues have to be improved if this position is to be maintained and certainly so if arbitration is to make any headway into other ranges of value of claim and size of dispute. As referred to in section 2.4.1, the AA followed UNCITRAL Model Law in providing, to a considerable extent, party autonomy, largely allowing the parties to have control of the procedures of arbitration. The AA has not however followed UNCITRAL in its review of 2010, where the arbitrator appears to have much more power in determining how arbitration is run. However, the Queen Mary International Arbitration Survey of 2015 and referred to in section 3.3.1, showed that duration and particularly cost were the two worst characteristics of international arbitration. This would suggest that other methods are needed to deal with these problems.

10.5.1 Controlling costs

Arbitrators have a mandatory responsibility to adopt procedures avoiding unnecessary delay and expense[407]. The research shows that 85% of Arbitrator respondents would not allow more than 28 days between the expiry of the date to comply with an order/direction before issuing a peremptory order and 68% would give less than 15 days[408], suggesting an intention to keep the arbitration moving. The research indicates that Lawyers are significantly involved with arbitrators in deciding the procedures to be used[409] and Lawyers consult with their clients[410], they are therefore significantly involved in influencing the incorporation of features that affect duration and hence cost of arbitration. Further, a significant number of

[405] Sections 6.4.1 and 6.4.3
[406] Section 6.4.5
[407] AA s.33(1)(a)
[408] Section 7.5.2
[409] Section 7.4.1
[410] Section 7.4.2

Arbitrators contend that they review cost and time saving procedures with the parties[411], which provides further opportunity for Lawyers and Users to influence cost and time saving procedures.

The data however, also indicates that a significant number of Lawyers and Users consider that arbitration takes too long and costs too much[412]. Therefore there has to be the question as to why, with such involvement, arbitration is perceived to take too long and cost too much. This may partly be answered by Lawyers and Users having a significant difference of opinion to that of Arbitrators as to the level of importance of approximately half of the features of arbitration that could limit duration and cost and are under discussion[413]. Further, many of the features that would have an effect on duration and cost are considered by both Lawyers and Users to be around neutral and therefore not overly important. In addition, departing from court style proceedings is not very important to Lawyers or Users, although Arbitrator respondents indicate that a significant number of Lawyers are prepared to move from court style proceedings in small arbitrations[414]. Using expedited methods is also not of particular high importance to Lawyers and Users and is only brought into the list of top ten features for the combined results[415]due to the high importance given to it by Arbitrators. Not only do Arbitrators consider that expedited methods are very important for the effective running of arbitration, they also consider that procedures that depart from litigation are also important. Therefore despite the involvement of Lawyers and Users in determining the procedures to be used, it is evident that these liaisons are not producing an effective control on duration and cost of arbitration.

Arbitrators and Lawyers provided additional information by way of interviews regarding control of duration and cost. One common reply, from both Arbitrator and Lawyer respondents, was that whilst parties may have started the arbitration

411 Section 7.5.1
412 Section 6.6.1.2
413 Section 7.3.3
414 Section 7.6.1
415 Section 7.3.1

with an expectation of controlling cost and duration, the desire to win their case becomes the overriding factor and costs ignored[416]. Another comment was that lawyers say they want controls on duration and cost but do not take the necessary steps for this to be achieved[417]. A further reason given by a majority of interviewees was that Lawyers have a leaning towards court style proceedings and considered that any curtailment of proceedings infringes their rights. A number of interviewees suggested that there was a vested interest by some Lawyers who, having targets to meet, did not consider controlling costs. This was further expanded by suggesting that many large companies now outsource much of the dispute resolution work due to cutbacks and although retaining a few directly employed staff, in effect relinquish control of the dispute, with the result that the firms contracted to do the work have regard to their own needs. A large majority of Arbitrator interviewees and half of the Lawyer interviewees referred to parties agreeing procedures between themselves[418], even if those procedures were not the most appropriate for the circumstances of the case. Where parties agree the procedures or a part of the procedures, the arbitrator cannot override their agreement if governed by the AA. All of these are reasons for costs remaining high and therefore these problems require to be solved. As referred to previously[419] the AA followed, to a large extent, the principles of the UNCITRAL Model Law, which at that time provided for party autonomy, thereby allowing the parties to agree many of the procedural matters. The UNCITRAL Arbitration Rules were amended in 2010, providing for the tribunal to determine how arbitration is conducted, but allowing the parties to express their views[420]. This provision has been incorporated into institutional rules, for example the CIArb, ICC, LCIA, however the AA has not been amended in this respect. Notwithstanding this, the International Arbitration Survey of 2015[421] still found duration, cost and overlawyering a problem. It could be recommended that the AA be amended to conform with UNCITRAL Rules, but the evidence from Queen Mary suggests that other remedies are required and these are set out in section 11.6.

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416 Section 9.3.2
417 Section 9.4.5
418 Sections 9.3.2 and 9.4.4
419 Section 2.4.1
420 UNCITRAL Arbitration Rules (as revise in 2010) Art. 17(2)
421 Section 3.3.1 Queen Mary University of London

This research has identified that Users and particularly Lawyers are reluctant to incorporate procedures that have a limiting effect on the case to be presented. Further, that whilst considering that cost is a major negative effect on choosing arbitration, the steps needed to reduce costs are not being taken, this despite the adequate opportunity to take them. This research suggests it is Users and in particular Lawyers who are largely responsible for the cost of arbitration remaining high. The indications therefore are that arbitration procedures are likely to remain close to those of the courts and that unless Lawyers and Users become more prepared to agree procedures that control duration and cost, arbitration will remain costly and result in arbitration being shunned. There is some hope for arbitration in that the trend indicates a slowdown of decline in the use of arbitration when comparing the two time scales used. Further the standing of arbitration for values between £1 million and £10 million is similar to litigation, adjudication and mediation. If these are to continue then cost and duration of arbitration must be curtailed.

10.6 SUMMARY OF CHAPTER

This chapter has brought together the results of the quantitative data and that from interviews. It has discussed the decline in the use of construction arbitration and the possible reasons why there has been a decline, although the indications are that decline has been less in the more recent period investigated than for the previous period. There has been discussion on arbitration as a method of dispute resolution and where arbitration might be considered as a first choice method by respondents. Additionally the standing of arbitration has been compared to that of litigation, statutory adjudication, mediation and expert determination. Features of arbitration that influenced respondents in a positive or negative way when considering using arbitration have been considered and the negative features discussed at length. The levels of importance of features influencing the effectiveness of arbitration have been considered, which has led to a viable explanation of why arbitration remains expensive and time consuming. Finally there has been a discussion on the cost of arbitration. This issue has had a

substantial influence on the recommendations made in the final chapter. In the next chapter the conclusions and recommendations are provided.

CHAPTER 11 CONCLUSIONS & RECOMMENDATIONS

11.1 INTRODUCTION

Chapter 10 provided a discussion of the analysis of questionnaire and interview data, establishing the base from which the conclusions were drawn. These conclusions are now dealt with in this chapter, together with recommendations to Institutions concerned with construction arbitration, construction arbitrators, users of construction arbitration and their lawyer advisers. Additionally there are some recommendations for further research.

11.2 SUMMARY OF THE RESEARCH

As referred to in chapter 1[422] giving the background to the research, construction arbitration was considered subject to decline, despite the attempts of legislation to provide procedures to deal with the complaints of arbitration that had developed prior to the passing of the AA. The AA provided for procedures to deal with the problem of cost and duration, being too complex procedurally and legalistically and to depart from procedures that were aligned to court procedures. These factors were identified when considering the background of arbitration in Chapter 2. Further, it appeared from the literature that arbitration had not taken advantage of the provisions that the AA provided and that competition from other methods of dispute resolution were affecting the use of arbitration. This study investigated the trend and use of construction arbitration, the factors that have a positive or negative effect on choosing arbitration and features and procedures that go towards an effective arbitration. It also investigated where, having regard to variables of size of claim and dispute, arbitration might be considered as the method of choice for resolving construction disputes. This also allowed a comparison to be made with litigation, statutory adjudication, mediation and expert determination. Pursuing these aims allowed the research questions to be answered and inferences to be drawn.

[422] Section 1.1

From the conceptual framework the philosophical approaches were investigated in Chapter 4. This resulted in a pragmatic theoretical perspective being adopted in which applying the appropriate methods to solve the research problem are the important issue. A survey strategy was used with questionnaires to the three main players in arbitration, who are the arbitrator, the users and the user's legal advisers. In addition a number of arbitrators and lawyers were interviewed to extend the answers from questionnaires and to provide clarification. Analysis of the data was analysed with limited discussion in Chapters 5 to 9, with a full discussion in Chapter 10, bringing together results from other chapters as necessary, to provide more holistic answers to the research questions. Chapter 11 gives the conclusions and recommendations to the players involved with arbitration and the institutions providing education and guidance on arbitration matters. Additionally there are recommendations on possible further research.

11.3 CONCLUSIONS OF THE RESEARCH

The main conclusions of the research are:

- For the ten year period measuring back from 2013, two five year periods were considered with respect to the use of arbitration in construction disputes. The result is that there has been a significant decline in the use of arbitration for resolving construction disputes in both periods. The trend however, is that there has been less of a decline for the period 2008 to 2013 than for the period 2003 to 2008. In effect therefore, there has been an increase in the use of arbitration for the period 2008 to2013 compared to the previous five year period. This provides the information that, in part, answers research question 1.

- Whilst contracts governing construction projects may specify the method of dispute resolution, this study investigated respondents' choices of method having regard to size of claim and size of dispute and provides part of the answer to research question 4. This thereby provided information of what respondents, free of contractual obligations,

considered the most appropriate method of dispute resolution within the variables referred to immediately above. The methods considered were arbitration, litigation, statutory adjudication, mediation and expert determination. Questionnaire findings showed a strong preference for statutory adjudication and to a slightly lesser degree mediation, for claims under £1 million. Interview data indicated that it was adjudication that had the most influence on the decline of arbitration and although mediation was referred to as a factor in the decline of arbitration, mediation had no great influence in the decline of arbitration according to interview responses. The standing of arbitration, that is comparing the scores for arbitration compared to the scores for the other methods, showed that for claims between £1 million and £10 million there was little difference between arbitration, litigation, adjudication and mediation. Expert determination scored poorly throughout all of the variables. For claims over £10 million, arbitration has a similar standing to mediation, a better standing than adjudication, however litigation is the most popular.

- As referred to above, adjudication and mediation had respondent scores well beyond those of arbitration for claims under £1 million for all three sizes of dispute, whilst for claims over £10 million, litigation scores were well above those of arbitration for all three sizes of dispute (research question 4). This resulted in the number of scores for arbitration as a percentage of the total possible scores being 11.6%. This is a low percentage, resulting from the strength of the other methods in the claim ranges referred to above. Whilst this result is derived from data relating to where arbitration might be used, as opposed to other methods referred to (research question 4), it also provides information as to how arbitration is viewed, which is part of research question 3. Further, also part of research question 3, as a method of dispute resolution arbitration was considered neutral, which is neither poor, nor excellent.

- The research indicates that arbitrators involve lawyers to a significant extent in deciding procedures to be used in arbitration and that lawyers

involve their clients to a significant extent in deciding procedures to be used. These are instrumental in conducting an effective arbitration and derive from research question 2.

- There was a bank of 24 features of arbitration for the User and Lawyer respondents to rate as having a positive or negative effect on choosing arbitration[423]. The four main positive features, having regard to the size of their mean, were that the award was binding and the process private and there was reasonable opportunity to present their own case and deal with that of the other party. Using principal component analysis (PCA), all of the positive features can be summarised as "a private process providing fairness, control of the process and an award that is final".

  With respect to negative features there was less of a difference between the means of the features, however the four lowest rated were, the cost of arbitration, the lack of confidence in arbitrators' decisions, delays due to party advisers and complexity of procedures. Using PCA all of the negative features can be summarised as "cost and complexity, with procedures styled on litigation and subject to delay and confidence issues".

  Knowing what it is that influences respondents towards or away from using arbitration is of considerable help in understanding what is required to make arbitration more attractive. They therefore have an influence on the use of arbitration and form part of the answer to research question 1.

- In order to answer research question 2, Arbitrator, User and Lawyer respondents were asked to rate a bank of 19 questions as to whether they were of no importance (1 on the scale), to being extremely important (7 on the scale) towards the effective running of arbitration[424]. Controlling cost, duration and complying with arbitrators orders were the three most important features. These were followed by the costs going to the winning

[423] Table 6.8 lists the positive features and Table 6.9 the negative features
[424] Table 7.1 shows the results of the rating for all of the features.

party, submitting a detailed claim early in the proceedings and the winning party not getting all of their costs[425] if having acted unreasonably during the course of the proceedings.

There were, however, a number of features that would assist in keeping costs down that were rated close to, or not far above, the neutral position of the scale used, indicating that these features were of lower priority and therefore less likely to be implemented. These were limiting disclosure of documents, limiting the number of witnesses of fact and opinion, limiting the amount of time given to present the claim and defence, limiting recoverable costs, not getting costs for issues lost and submitting at an early stage the law that would be relied upon. It is also noted that individually Lawyers also rated the early determination of issues and the use of expedited methods in the neutral zone. Further, out of the 19 features considered there were 9 where the opinions of Arbitrators were significantly different to those of Lawyers or Users. It is therefore reasonable to consider that these differences may cause some conflict between Arbitrators and Lawyers/Users in deciding the procedures to be used.

- The inference from this study is that Lawyer and User respondents consider that cost and duration of arbitration are major negative factors on choosing arbitration as the method of resolving construction disputes (research question 1) and that controlling cost and duration is very important to effectively conduct arbitration (research question 2). As referred to above, arbitrators involve lawyers and lawyers their clients in determining procedures and the survey indicates that a significant majority of arbitrators review cost and time saving procedures during arbitration (research question 2). There should therefore be ample opportunity to control cost and duration of arbitration. As referred to immediately above, there is reluctance for Users and Lawyers in particular, for the implementation of many of the procedures that allows

[425] It is not usual for parties to get all of their costs, but to get what is referred to as recoverable costs. The feature therefore refers to a restriction on obtaining all of the recoverable costs.

this to occur. Interview data indicates that there is a tendency for lawyers to move towards court style proceedings and that truncating arbitration procedure is likely to be considered by lawyers as an infringement of their party's rights. These results indicate a possible causal link to arbitration remaining expensive and time consuming. Further, there is the inference that Users and particularly Lawyers are reluctant to take the steps to control duration and cost, despite the solution being in their hands.

11.4 CONTRIBUTION TO KNOWLEDGE

The use and trend of construction arbitration was considered in section 6.4. Reynolds surveyed arbitration generally, as opposed to construction arbitration and considered that there had been a decline in arbitration, although he did not specify the degree, but that decline had "bottomed out". Data for Reynolds's research was from institutions. Black and Fenn obtained data from institutions regarding the number of arbitration appointments. Whilst there was a suggestion of declining numbers, they reported that due to incomplete records or inadequate detail, analysis was not possible. This research provides empirical data that suggests construction arbitration has seen a significant decline in both periods investigated, but the trend is towards the rate of decline decreasing. This is contrary to the finding by Reynolds. This research also indicated that the degree of decline reduced as the size of the arbitration increased. The empirical nature of this research differs from that of Reynolds and the source of the data is different. This research therefore builds on both that of Reynolds and Black and Fenn and it provides the degree of decline and introduces the variable of size of arbitration, which were not included in the previous research. Additionally, respondents considered, to a significant degree, that there had not been a decrease in the number of disputes, hence decline in the use of arbitration was not attributable to a decline in the number of disputes. This is therefore new data on the use and trend of construction arbitration.

This investigation pursued the circumstances where respondents, having regard to variables of size of claim and size of dispute, considered either arbitration, litigation, statutory adjudication, mediation and expert determination the most suitable means of dispute resolution. This enabled determination of the extent respondents considered arbitration to be the most suitable method, compared to choosing any one of the other methods referred to immediately above. This revealed that, according to respondents, there was an 11.58% chance of arbitration being chosen, compared to any one of the other methods and that Users were more inclined towards arbitration than were Lawyers. There does not appear to be any recent empirical data indicating the percentage chance of arbitration being chosen rather than any one of the other four methods referred to in this study. This is therefore, new empirical data. For clarification, this is not empirical data of where arbitration, or the other methods, has been entered into a construction contract, but where respondents considered which method the most suitable, having regard to the variables referred to.

The above data, relating to the suitability of methods, also allows the determination of the standing of each method compared to one another by comparing their scores. This revealed that expert determination was not considered by respondents as suitable for the majority of claim and dispute sizes. That adjudication and mediation were far more popular for values under £1 million and litigation for values over £10 million. Further that arbitration had similar standing to litigation, statutory adjudication and mediation for claims between £1 million and £10 million. For claims over £10 million arbitration had similar standing to mediation and better than adjudication, but litigation was by far the most popular. Reynolds suggested that mediation or adjudication were preferred for lower range claims, but did not identify what the range might be. Reynolds also considered that adjudication was the most popular method of resolving construction disputes and that litigation was preferred rather than arbitration, these opinions being obtained from interviews with arbitrators. The results from this thesis are based on empirical data from both Lawyer and User respondents and involve different sized disputes and ranges of claim. This extends the research of Reynolds. Further, there does not appear to be any recent research identifying

how arbitration, litigation, statutory adjudication, mediation and expert determination compare with each other over variables of size of dispute and claim values. This also enables the impact of these other methods on arbitration to be assessed. These matters are therefore new and/or updating.

With respect to the factors that influence choosing arbitration, Brooker used empirical data to determine that duration, cost and adversarial approach were negative influences on arbitration. Reynolds concluded the same result, with the addition of ‘a lack of quality and skill’, from interviews with arbitrators. Whilst Reynolds and Brooker refer to negative features, this research identifies both negative and positive factors influencing the choice of arbitration. In addition to those negative features identified by Brooker and Reynolds, this research indicates that delays caused by non-availability of both arbitrators and lawyers have a negative effect on choosing arbitration. Additionally, complexity of procedures and the likely unavailability of the preferred arbitrator are also considered by respondents to influence them in a negative way. This research brings new knowledge in that it extends, considerably, the understanding of the influence of various features of arbitration on parties and their lawyer advisers when considering arbitration as their dispute resolving method.

The effectiveness of arbitration is an important element to those considering using or conducting arbitration. From the perspective of this thesis, to be effective, the process needs to be fair and efficient, producing the desired result, including the final outcome of the award. Factors influencing the effectiveness of arbitration were considered in the first instance by assessing respondents’ opinions as to the importance of 19 procedural features of arbitration. As it was considered that there were several matters, other than procedural features, that had an influence on the effectiveness of arbitration. For example, if arbitrators involve lawyers and lawyers their clients in deciding the procedures for conducting the arbitration, it is arguable that this will make the whole process more effective. Similarly, if arbitrators carry out duration and cost reviews, as appropriate, during the course of arbitration and issue peremptory orders, if necessary, in a timely fashion, then these can only

increase efficiency and effectiveness. Arbitration being too much like litigation was also considered by respondents as a problem with arbitration and clearly its effectiveness. The degree that lawyers move away from court procedures is therefore an indication of effectiveness. If not overall, then from the perspective of either lawyers or their clients, there are conflicting outcomes that will have an influence on the perception of whether the process was effective. Such items as whether speed of the process is more important than getting an award that is correct, saving cost more important than justice between the parties, getting a quick decision, but losing out in respect of the amount claimed, or is winning no matter what the cost more important to parties. These matters have been investigated in this thesis. Beynon and Brooker used empirical data to show that arbitration was slow and not cost effective, Reynolds derived arbitration as slow and expensive from the perceptions of arbitrators in interviews. Black and Fenn showed that a high proportion (67%) of their respondents implemented court style procedures. Beynon, using empirical data, showed arbitration was like litigation, whilst Brooker and Reynolds found, from interview data, that there was a tendency towards court style procedures. This research therefore considerably extends and updates other research.

11.5 LIMITATIONS

The study was limited to England and Wales and applied to construction arbitration as opposed to all arbitration. Sample sizes were sufficiently large for inferential statistics, however larger sample sizes, particularly in respect to Users, would improve the validity of the results. It is impossible to assess bias where respondents give an answer, although they do not know the answer, or an answer that is inaccurate, or one which the respondent considers puts them in a more favourable light[426]. It would however be expected that such bias would be minimal, as the respondents are knowledgeable people, with Arbitrator and Lawyer respondents being well educated in the field of construction dispute resolution and with User respondents, all holding responsible positions.

[426] Gomm, R. (2004) *Social Research Methodology a critical introduction.* Basingstoke: Palgrave Macmillan p. 152

11.6 RECOMMENDATIONS

The research, having regard to the limitations, has provided findings that extend the understanding of construction arbitration. It has identified the level of importance, given by respondents, of features for the effective running of arbitration. This in turn has led to identifying where possible weaknesses lie with the arbitral process. In addition, the research has confirmed that the problems that afflicted arbitration prior to the passing of the AA have not been fully resolved. These matters assist in the recommendations put forward. Some of the recommendations are not new and the remedy to some of the problems exists, at least in part, but the research suggests that they are not being acted upon.

1. Education

Education that arbitration is not intended to be litigation in a private forum. This would require Universities offering first degree courses in law and other first degree courses that may include dispute resolution, such as surveying, building and civil engineering to include this within their curriculum. This also applies to post graduate degree in construction law or similar. Institutions should make this distinction in their own courses and with continuing practical development (CPD). If this obstacle can be removed, then measures that allow justice to be done, but do not follow the worst excesses of court procedures, may be more readily accepted. It is worth noting that the two methods in this study receiving the largest number of scores for being preferred as the first choice for resolving construction disputes were statutory adjudication and mediation. Neither of these methods is conducted as if they were mock litigation and Users and Lawyers accept the limitations of the procedures and the errors that can occur with these methods. Further, for mediation to succeed there has to be compromise between the parties with one or both parties accepting situations that they may not truly believe provides justice. Returning to education on arbitration, the provisions in the Arbitration Act allows for flexibility having regard to the particular dispute in question. This gives the arbitrator, the parties and their advisers the flexibility to use whatever methods are appropriate to resolve the

dispute, provided they do not stray outside of public interest. Litigation however is conducted under the CPR and judges and the parties are bound by those rules. Further, using procedures that differ from court procedures does not mean that justice between the parties cannot be achieved. Arbitration, through its flexibility, offers a different approach for resolving construction disputes to that of litigation and education is required to provide confidence in using arbitration as was intended by the Departmental Advisory Committee when advising on the Arbitration Act.

2. Availability of Arbitrator and Representatives

The study indicated that respondents considered the unavailability of party advisers and arbitrators during the arbitral process a negative effect on choosing arbitration. It is therefore recommended that arbitrators sign a declaration, when accepting an appointment, that they are able to devote sufficient time to conduct the arbitration in an efficient and expeditious manner. Similarly a declaration from Lawyers involved. It is acknowledged that this is required in international arbitration and some institutional rules, but it is not a requirement in all rules, nor would it automatically apply to ad hoc arbitrations unless specifically implemented. It is therefore recommended that this provision be applied if not already part of the process. Sanctions against a defaulting arbitrator or lawyer are not recommended as this would likely result in too much time being allocated and work likely to expand to fill any time gap. The recommendation is to get arbitrators and lawyers to focus the mind on the matter, which may not fully be the case otherwise.

3. Failure to proceed with the claim/counterclaim

This recommendation is likely to be unattractive to lawyers as it would likely be perceived as a restriction on their party's rights, however as none compliance with an order results in delay, it is a matter that should be considered as duration of arbitration is a major issue. It is suggested that there should be agreement in the contract that if after 14 days (or some other period) from the expiry of the date of a peremptory order for the claimant to supply details of the claim and such details have not been submitted, that the dispute is deemed to be settled in all and every respect, similarly in respect

of the defending party supplying any counterclaim. That is to say that there is no longer is a dispute between the parties and the arbitrator would be free to make a declaration to this effect. This would encourage the claim and counterclaim to be pursued diligently. It is acknowledged that there is provision in the AA under s.41(3) for dismissing a claim for inordinate and inexcusable delay, however there are conditions that have to be fulfilled before a claim can be dismissed. To deal with these conditions, arguments and counterarguments would ensue, with the result that further expense and delay is incurred. The recommendation makes it unnecessary to go through this process. Safeguards can be incorporated to cover legitimate delays, however it is submitted that arbitrators are experienced and wise enough to have regard to legitimate arguments before issuing a peremptory order.

4. Cost of interlocutory meetings

The following recommendation is made to dissuade parties from asking for interlocutory meetings that are not necessary and sometimes used as a delaying tactic, with the result that duration and costs are increased. The recommendation can be introduced at the preliminary meeting to make parties aware of the arbitrator's intentions, or by agreement in the contract. Where an interlocutory meeting is requested by a party and the arbitrator decides that the costs of that meeting should be borne by that party, that the costs are payable forthwith. This may induce party lawyers to be more certain that an interlocutory meeting is, in fact, required. Further it ensures that the users are aware of what is happening. It is acknowledged that it is usual for lawyers to ask for costs to be reserved, but this puts the issue to the end of the arbitration, where it is of no assistance in reducing duration and cost.

5. Cost of disclosure

A request made by a party for documents outside of those that are relied upon in a claim or defence/counterclaim, the cost of producing those documents, which includes searching and finding documents, to be paid for by the requesting party at the time of the request. Where the additional documents prove to have been necessary to the claim, defence/counterclaim, this can be compensated for in the costs of the

arbitration. This may help to stop documents being requested that are of little use in supporting the claim, defence/counterclaim.

6. Extensions of time

If an extension of time to carry out an order of the arbitrator is requested by a party and the arbitrator grants that request, any cost incurred in the delay, or such sum as the arbitrator considers appropriate, should be paid for by the party making the request forthwith. This would assist in reducing the frequency of asking for additional time as a delaying tactic and also penalising a party who has not carried out their obligations under AA s. 40(1) which is a mandatory obligation on a party to do those things that are necessary for a proper and expeditious arbitration. It also assists the arbitrator in that having regard to his AA s.33 duties, he may well be under pressure not to refuse such a request due to his vulnerability of being appealed, even if he believes the request is a fabrication to frustrate the process, or that the requesting party simply has not got on with the job. The final costs of the arbitration can be used to amend any injustice to the requesting party that is subsequently revealed. It is acknowledged that assessing such cost could be difficult, but a rough assessment, erring on the side of the payer, could be made, or a set sum payable subject to amendment when true costs are known.

7. Witnesses of opinion reports

Expert witnesses are expensive and cross examinations time consuming. Witnesses of opinion to have a page limit for their reports that are submitted as evidence. Regard to the complexity of the case and the issues involved would have to be considered and there would have to be consultation between arbitrator and lawyers, with permission to exceed should there be good reason to do so.

10. Marketing of expedited methods of arbitration

Many Institutions have expedited methods of arbitration and many disputes could benefit from using these methods, which are intended to reduce the cost and duration of arbitration without reducing justice between the parties.

Marketing these methods, or educating lawyers and companies of their existence and the benefits that such methods can provide could be useful to those involved with construction disputes who desire fairness and a binding decision at reasonable cost and in a reasonable timescale. It could be considered as part of the education on arbitration. It is also emphasised that shortened versions of arbitration may well not be appropriate for all situations, but knowledge of them and how they work must have advantages.

11.7 RECOMMENDATIONS FOR FURTHER RESEARCH

1. Further investigation of how Users of arbitration consider arbitration as referred to in this study, but with a larger sample.

2. Investigation as to the degree of knowledge Users have regarding the arbitral process and their obligations towards the process.

3. Investigation into why there is some dissatisfaction with arbitrators' decisions.

4. Investigation into the cost and duration of adjudication and mediation.

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TABLE OF CASES

APPENDIX A QUESTIONNAIRE FOR ARBITRATORS

WOLVERHAMPTON UNIVERSITY

CONSTRUCTION ARBITRATION – ARBITRATORS' PERSPECTIVE

This research is being undertaken as part of a PhD study at the University of Wolverhampton and information supplied by you will remain confidential. No individual or company/firm will be identified in the presentation of the thesis, or in the public domain in any form. After completion of the PhD, all data will be properly disposed of in accordance with the Data Protection Act(1998)

This research is in respect of construction arbitration in England & Wales. The aim of the research is to determine the factors that influence the performance and use of construction arbitration in the 21st century. It is therefore necessary to determine what the views and perceptions are of those who actually use dispute resolution methods. As an Arbitrator, your input is a vital part of the research and without it the ultimate conclusions reached would be incomplete.

The only requirement to filling in the questionnaire is that you have carried out a minimum of one construction arbitration as the arbitrator.

Reference to arbitration is governed by the Arbitration Act (1996). Reference to adjudication is statutory adjudication under the Housing Grants Construction & Regeneration Act (1996), as amended.

There are questions that refer to small, medium and large disputes (or arbitrations). A definition of these terms is not given as it would possibly put restrictions where there should not be any. The following are only given as a general guide.

- **Small disputes/arbitrations** are those with few, uncomplicated issues, requiring little evidential support. It is not related to the amount of the claim.
- **Medium disputes/arbitrations** have a greater number of issues, or issues with a degree of complexity, requiring a moderate amount of evidential support. It is not related to the amount of the claim.
- **Large disputes/arbitrations** are those with a large number of issues, or issues of considerable complexity, requiring a considerable amount of evidential support. It is not related to the amount of the claim.

If you have any queries, please contact **William H. Fisher.** Contact details are below.

28, Elder Lane,
Griffydam,

Leicestershire.
LE67 8HD
Telephone 01530 222520
Email williamhfisher1@gmail.com **or** w.fisher@wlv.ac.uk

Please mark with a **X** your answers in the appropriate boxes throughout

1. Which of the following best describes your main professional background	
Solicitor	Barrister
Building Surveyor	Architect
Engineer	Quantity Surveyor
Other (please specify)	

2. Are you the sole person in your firm conducting arbitrations?	
Yes	No

3. How many construction / engineering arbitrations have you conducted, including those that have been settled before completion of the arbitral process?					
1-5	6-10	11-25	26-50	51-100	100+

4. In the arbitrations that you have conducted in the past 5 years, what is the approximate mean value of claim?
£
Please comment if appropriate.

5. In the arbitrations that you have conducted in the past 5 years, what has been the approximate mean duration?
Please comment if appropriate.

6. In the arbitrations that you have conducted in the past 5 years, what is the approximate mean cost of the arbitration, ignoring your own fees
£
Please comment if appropriate.

7. Below are several categories in which disputes arise. From your experience, please mark the categories in order of frequency. eg. most frequent 1, next most frequent 2, third most frequent 3 etc.	
(a) workmanship	(b)extension of time
(c) loss & expense	(d) variations

(e) design	(e) other (specify)

8. Below are different sources of appointment. Please mark in order of frequency the sources that apply to you. eg. most frequent 1, next most frequent 2	
(a) named in contract	(b) by nominating body
(c) other (Please specify)	

9. In your opinion how has the number of arbitrations changed over the past 5 years? Where 1 = significantly reduced , 2 = reduced, 3 = no change, 4 = increased and 5 = significantly increased.

	Significantly Reduced 1	2	3	4	Significantly increased 5	Do not know
(i) small arbitrations						
(ii) medium arbitrations						
(iii) large arbitrations						

10. In your opinion how has the number of arbitrations changed over the period from 10 years ago to 5 years ago ? Where 1 = significantly reduced , 2 = reduced, 3 = no change, 4 = increased and 5 = significantly increased.

	Significantly Reduced 1	2	3	4	Significantly increased 5	Do not know
(i) small arbitrations						
(ii) medium arbitrations						
(iii) large arbitrations						

11. Please make any comments relating to the number of arbitrations in construction that you consider might be useful to the research.

12. To what extent do you agree/disagree that there are now <u>fewer disputes</u> arising in the construction industry than in 1997(when the Arbitration Act came into force). Using the scale 1= totally agree, 2= agree	
1. totally agree	2. agree
3. neutral	4. disagree
5. totally disagree	6. do not know

13. In respect of the following statements regarding features of arbitration, how much do you agree/disagree with the following statements? Using the scale from 1= totally disagree through to 7 = totally agreement

	totally						totally

	disagree 1	2	3	4	5	6	agree 7
(a) parties are able to choose the arbitrator							
(b) first choice arbitrator is often unavailable to accept appointment							
(c) delays caused due to unavailability of arbitrator when arranging meetings							
(d) there is a lack of confidence in arbitrators decisions							
(e) the parties can influence the choice of procedures							
(f) parties have a reasonable opportunity to present their case							
(g) parties have a reasonable opportunity to deal with the other party's case							
(h) delays are caused due to the unavailability of party advisers when arranging meetings							
(i) lawyers are reluctant to depart from court style procedures							
(j) lawyers prefer an adversarial approach							
(k) lawyers tend to be confrontational in the actual proceedings							
(l) lawyer's fees are a substantial part of the overall cost of the arbitration							
(m) it is too much like litigation							
(n) procedures can be tailored to suit the case							
(o) the procedures of arbitration are flexible							
(p) being held in private is advantageous							
(q) the law of arbitration is complex							
(r) procedures are too adversarial							
(s) arbitration takes too long from start to final decision							
(t) procedures used are easily understood							
(u) having a binding award is advantageous							
(v) decisions provide justice between the parties							
(w) appeals against awards are severely limited							
(x) arbitrations are too costly							
(y) the winning party gets their costs							

14. In your opinion is the speed of making a decision more important than getting a decision that is correct?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

15. In your opinion is cost saving more important than getting a decision that provides justice between the parties?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

16. Do you consider it important that the arbitrator is a lawyer?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

17. Do you consider it important that the arbitrator has technical knowledge of the subject matter of the dispute?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

18. Do you consider that when involved with arbitration it is essential that the parties are represented by a lawyer?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

19. Assuming a claim is fully justified, is it more important to give a quick decision than to give the full amount claimed if this will take a long time to ascertain?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

20. Please rate the following on how important you consider them to be in the effective running of the arbitral process . Where 1 represents “no importance” and 7 represents “extremely important”

	no importance 1	2	3	4	5	6	Extremely important 7
(a) the overall control of costs							
(b) keeping costs proportional to the claim							
(c) limiting the amount of costs a party can recover							
(d) costs going to the winning party							
(e) winning party not getting costs for issues lost							
(f) winning party not getting all of their costs if they have acted unreasonably during the arbitration							
(g) the overall control of time							
(h) limiting the amount of documents to be disclosed							
(i) limiting the number of expert witnesses							
(j) limiting the number of witnesses of fact							
(k) limiting the amount of time given to each party to present their case at a hearing							

(l) submitting a detailed claim early in the proceedings							
(m) early submission of how the claim is to be proven							
(n) early submission of the law to be relied upon							
(o) complying with time limits in arbitrator's orders							
(p) the use of expedited methods in small claims							
(q) the use of expedited methods in medium claims							
(r) the use of procedures based on litigation (court)							
(s) the use of procedures that depart from litigation (court)							
(t) early determination of issues							

21. Do you generally involve party advisers in deciding what procedures are to be used?

rarely 1	2	3	4	5	6	always 7	Not applicable

22. If a party is unrepresented by a lawyer, do you generally involve that party in deciding procedures to be used?

rarely 1	2	3	4	5	6	always 7	Not applicable

23. From your experience/perception, to what extent do you find party advisers willing to move from court style procedures?

	rarely 1	2	3	4	5	6	always 7
small arbitrations							
medium arbitrations							
large arbitrations							

24. In your experience/perception, to what extent do you find that involving party advisers in determining procedures to be used improves the efficiency of the arbitration?

not at all 1	2	3	4	5	6	greatly 7

25. To what extent do you take the following action during an arbitration?

	never 1	2	3	4	5	6	always 7

(a) meet experts without the presence of party adviser							
(b) dispense with expert reports							
(c) dispense with pleadings							
(d) review cost saving procedures with the parties							
(review time saving procedures with the parties							

26. How long do you generally allow fromthe expiration of the date to comply with an Order /Instruction to issuing a Peremptory Order?	
1. up to 7 days	2. more than 7 days, but less than 15 days
3. more than 15 days, but less than 28 days	4. more than 28days
27. How satisfied were you with the arbitrations that you have been involved with? Please comment below	

28. Would you be prepared to take part in a confidential face to face / telephone interview lastin between 30-40 minutes	
1. yes	2. no

29. If Yes to Q28, please provide name of respondent, telephone number and email address.

APPENDIX B QUESTIONNAIRE TO LAWYERS

This questionnaire contained the same preamble as for the Arbitrators' questionnaire

Please mark with a X your answers in the appropriate boxes throughout

1. Name of firm

2. Which of the following bests describes you?	
1. solicitor in sole practice	2. solicitor in multi-solicitor practice
3. practicing barrister	4. non-practicing barrister
5. in house lawyer	6. other (please specify below)

3. How long have you been qualified?

4. Do you hold any additional qualifications in any aspect of construction law?	
1. Yes	2. No
If yes, what are they?	

5. Have you been involved in any capacity in an arbitration	
1. Yes	2. No

6. How would you rate the following methods for resolving **small** construction disputes with few, uncomplicated issues and requiring little evidential support? Where 1= poor and 7 = excellent

	Poor 1	2	3	4	5	6	Excellent 7
(i) litigation							
(ii) arbitration							
(iii) statutory adjudication							
(iv) mediation							
(v) expert determination							
(vi) other (please specify)							

7. How would you rate the following methods for resolving **medium** construction disputes with a greater number of issues, or issues with a degree of complexity, requiring a moderate amount of evidential support? Where 1= poor and 7 = excellent

	Poor 1	2	3	4	5	6	Excellent 7
(i) litigation							
(ii) arbitration							
(iii) statutory adjudication							
(iv) mediation							
(v) expert determination							
(vi) other (please specify)							

8. How would you rate the following methods for resolving **large** construction disputes with large number of issues, or issues of considerable complexity, requiring a considerable amount of evidential support? Where 1= poor and 7 = excellent

	Poor 1	2	3	4	5	6	Excellent 7
(i) litigation							
(ii) arbitration							
(iii) statutory adjudication							
(iv) mediation							
(v) expert determination							
(vi) other (please specify)							

9. What is your first choice method for resolving **small** disputes with few uncomplicated issues etc.?

Amount claimed	litigation	arbitration	Statutory adjudication	mediation	Expert determination	Other(specify)
(i) under £50,000						
(ii) £50,000 to under£200,000						
(iii)£200,000 to under £1 million						
(iv) £1 million to under £10 million						
(v) over £10 million						

10. What is your first choice method for resolving **medium** disputes with greater number of issues etc.?

Amount claimed	litigation	arbitration	Statutory adjudication	mediation	Expert determination	Other(specify)
(i) under £50,000						
(ii) £50,000 to under£200,000						
(iii)£200,000 to under £1 million						
(iv) £1 million to under £10 million						
(v) over £10 million						

11. What is your first choice method for resolving **large** disputes with considerable complexity etc.?						
Amount claimed	litigation	arbitration	Statutory adjudication	mediation	Expert determination	Other(specify)
(i) under £50,000						
(ii) £50,000 to under£200,000						
(iii)£200,000 to under £1 million						
(iv) £1 million to under £10 million						
(v) over £10 million						

12. In your opinion how has the number of arbitrations changed over the past 5 years? Where 1 = significantly reduced , 2 = reduced, 3 = no change, 4 = increased and 5 = significantly increased.						
	Significantly Reduced 1	2	3	4	Significantly increased 5	Do not know
(i) small arbitrations						
(ii) medium arbitrations						
(iii) large arbitrations						

13. In your opinion how has the number of arbitrations changed over the period from 10 years ago to 5 years ago ? Where 1 = significantly reduced , 2 = reduced, 3 = no change, 4 = increased and 5 = significantly increased.						
	Significantly Reduced 1	2	3	4	Significantly increased 5	Do not know
(i) small arbitrations						
(ii) medium arbitrations						
(iii) large arbitrations						

14. Please make any comments relating to the number of arbitrations in construction that you consider might be useful to the research.

15. To what extent do you agree/disagree that there are now fewer disputes arising in the construction industry than in 1997(when the Arbitration Act came into force). Using the scale 1= totally agree, 2= agree

1. totally agree	2. agree
3. neutral	4. disagree
5. totally disagree	6. do not know

16. In respect of the following statements regarding features of arbitration, how much do you agree/disagree with the following statements? Using the scale from 1= totally disagree through to 7 = totally agreement							
	totally disagree 1	2	3	4	5	6	totally agree 7
(a) parties are able to choose the arbitrator							
(b) first choice arbitrator is often unavailable to accept appointment							
(c) delays caused due to unavailability of arbitrator when arranging meetings							
(d) there is a lack of confidence in arbitrators decisions							
(e) the parties can influence the choice of procedures							
(f) parties have a reasonable opportunity to present their case							
(g) parties have a reasonable opportunity to deal with the other party's case							
(h) delays are caused due to the unavailability of party advisers when arranging meetings							
(i) lawyers are reluctant to depart from court style procedures							
(j) lawyers prefer to use an adversarial approach							
(k) lawyer's fees are a substantial part of the overall cost of the arbitration							
(l) it is too much like litigation							
(m) procedures can be tailored to suit the case							
(n) the procedures of arbitration are flexible							
(o) being held in private is advantageous							
(p) the law of arbitration is complex							
(q) procedures are too adversarial							
(r) arbitration takes too long from start to final decision							
(s) procedures used are easily understood							
(t) having a binding award is advantageous							
(u) decisions provide justice between the parties							
(v) appeals against awards are severely limited							
(w) arbitrations are too costly							
(x) the winning party gets their costs							

Please comment on any other feature of arbitration that you feel night be useful to this study.

17. Please tick only those reasons that would make (or will make) you advise clients to select **Litigation** instead of arbitration. If generally you would not advise clients to select Litigation over Arbitration, do not tick any of the boxes.
Litigation:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
Any comments of other factors affecting your choice

18. Please tick only those reasons that would make (or will make) you advise clients to select **Statutory Adjudication** instead of arbitration. If generally you would not advise clients to select Statutory Adjudication over Arbitration, do not tick any of the boxes.
Statutory Adjudication:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
Any comments of other factors affecting your choice

19. Please tick only those reasons that would make (or will make) you advise clients to select **Mediation** instead of arbitration. If generally you would not advise clients to select Mediation over Arbitration, do not tick any of the boxes.
Mediation:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
7. is not dependant on third party decision
Any comments of other factors affecting your choice

20. Please tick only those reasons that would make (or will make) you advise clients to select **Expert Determination** instead of arbitration. If generally you would not advise clients to select Expert Determination over Arbitration, do not tick any of the boxes.
Expert Determination:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
Any comments of other factors affecting your choice

21. How do you rate the effect of the following factors on your recommendation of arbitration to clients as the method of solving construction disputes? Where the 1 end of the scale represents significantly negative affect and the 7 end of the scale a significant positive affect							
	Significant negative 1	2	3	4	5	6	Significant positive 7
(a) parties are able to choose the arbitrator							
(b) first choice arbitrator is often unavailable to accept appointment							
(c) delays caused due to unavailability of arbitrator when arranging meetings							
(d) there is a lack of confidence in arbitrators decisions							
(e) the parties can influence the choice of procedures							
(f) parties have a reasonable opportunity to present their case							
(g) parties have a reasonable opportunity to deal with the other party's case							
h) delays are caused due to the unavailability of party advisers when arranging meetings							
(i) lawyers are reluctant to depart from court style procedures							
(j) lawyers prefer an adversarial approach							
(k) lawyers tend to be confrontational in the actual proceedings							
(l) lawyer's fees are a substantial part of the overall cost of the arbitration							
(m) it is too much like litigation							
(n) procedures can be tailored to suit the case							
(o) the procedures of arbitration are flexible							
(p) the process is private							
(q) complexity of arbitration law							
(r) too adversarial							
(s) complexity of procedures used							
(t) the award is binding							
(u) decisions provide justice between the parties							

(v) appeals against awards are severely limited							
(w) the cost of arbitration							
(x) the winning party gets their costs							
(y) parties can agree to exclude appeals on errors of law							
Please comment on any other feature of arbitration that you feel night be useful to this study.							

22. In your opinion is the speed of making a decision more important than getting a decision that is correct?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

23. In your opinion is cost saving more important than getting a decision that provides justice between the parties?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

24. Is privacy an important factor when recommending which method of dispute resolution to use?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

25. Is privacy more important than getting a decision that provdes justice between the parties?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

26. Do you consider it important that the arbitrator is a lawyer?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

27. Do you consider it important that the arbitrator has technical knowledge of the subject matter of the dispute?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

28. Assuming a claim is fully justified, is it more important to give a quick decision than to give the full amount claimed if this will take a long time to ascertain?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

29. Please rate the following on how important you consider them to be in the effective running of the arbitral process . Where 1 represents "no importance" and 7 represents "extremely important"

	no importance 1	2	3	4	5	6	Extremely important 7
(a) the overall control of costs							
(b) keeping costs proportional to the claim							
(c) limiting the amount of costs a party can recover							
(d) costs going to the winning party							
(e) winning party not getting costs for issues lost							
(f) winning party not getting all of their costs if they have acted unreasonably during the arbitration							
(g) the overall control of time							
(h) limiting the amount of documents to be disclosed							
(i) limiting the number of expert witnesses							
(j) limiting the number of witnesses of fact							
(k) limiting the amount of time given to each party to present their case at a hearing							
(l) submitting a detailed claim early in the proceedings							
(m) early submission of how the claim is to be proven							
(n) early submission of the law to be relied upon							
(o) complying with time limits in arbitrator's orders							
(p) the use of expedited methods							
(q) the use of procedures based on litigation (court)							
(r) the use of procedures that depart from litigation (court)							
(s) early determination of issues							

30. Do you generally find that the arbitrator involves you in deciding what procedures are to be used?

rarely 1	2	3	4	5	6	always 7	Not applicable

31. Do you generally involve your client in deciding procedures to be used in arbitration?

rarely 1	2	3	4	5	6	always 7	Not applicable

32. Please indicate the approximate number of arbitrations that you were involved in 2012

33. Please indicate the approximate number of arbitrations that you were involved in 2007

34. Please indicate the approximate number of arbitrations that you were involved in 2002

35. How satisfied were you generally with the arbitrations that you have been involved with?

36. From your experience would you advise using arbitration again?	
Yes	No

37. If you answered no to Q36, what features of arbitration,if any, would need to change to alter your mind?

38. Would you be prepared to take part in a face to face/telephone confidential interview which would last 30-40 minutes	
Yes	No

39. If you answered yes to Q38, please supply Name, Telephone number and Email

APPENDIX C QUESTIONNAIRE TO USERS

1. Which of the following bests describes your organisation?	
1. employer	2. main contractor
3. sub-contractor	4. other (please specify below)

2. For the purposes of classification would you please describe the main activity/ nature of your organisation? More than one can be specified where appropriate. Eg. Borough Council, Civil Engineering, Building Construction, Piling, Electrical etc.

3. What size of organisation are you on the basis of turnover?	
1. under £5 million	2. £5 million to under £10 million
3. £10 million to under £50 million	4. £50 million and over

4. What position in the organisation do you hold?

5. How many years experience in, or relating to, the construction industry do you have?

6. What is your background? Eg quantity surveyor, lawyer etc.

7. Have you been involved in any capacity in an arbitration.	
1. yes	2. no
If yes – in what capacity	

8. How would you rate the following methods for resolving **small_** construction disputes with few, uncomplicated issues and requiring little evidential support? Where 1= poor and 7 = excellent

	Poor 1	2	3	4	5	6	Excellent 7
(i) litigation							
(ii) arbitration							
(iii) statutory adjudication							
(iv) mediation							
(v) expert determination							
(vi) other (please specify)							

9. How would you rate the following methods for resolving **medium** construction disputes with a greater number of issues, or issues with a degree of complexity, requiring a moderate amount of evidential support? Where 1= poor and 7 = excellent

	Poor 1	2	3	4	5	6	Excellent 7
(i) litigation							
(ii) arbitration							
(iii) statutory adjudication							
(iv) mediation							
(v) expert determination							
(vi) other (please specify)							

10. How would you rate the following methods for resolving **large** construction disputes with large number of issues, or issues of considerable complexity, requiring a considerable amount of evidential support? Where 1= poor and 7 = excellent

	Poor 1	2	3	4	5	6	Excellent 7
(i) litigation							
(ii) arbitration							
(iii) statutory adjudication							
(iv) mediation							
(v) expert determination							
(vi) other (please specify)							

11. What is your first choice method for resolving **small** disputes with few uncomplicated issues etc. For each of the categories ofamount claimed?

Amount claimed	litigation	arbitration	Statutory adjudication	mediation	Expert determination	Other (specify)
(i) under £50,000						
(ii) £50,000 to under£200,000						
(iii)£200,000 to under £1 million						
(iv) £1 million to under £10 million						
(v) over £10 million						

12. What is your first choice method for resolving **medium** disputes with greater number of issues etc. For each of the categories ofamount claimed?

Amount claimed	litigation	arbitration	Statutory adjudication	mediation	Expert determination	Other (specify)
(i) under £50,000						
(ii) £50,000 to						

under£200,000						
(iii)£200,000 to under £1 million						
(iv) £1 million to under £10 million						
(v) over £10 million						

13. What is your first choice method for resolving **large** disputes with considerable complexity etc. For each of the categories ofamount claimed?						
Amount claimed	litigation	arbitration	Statutory adjudication	mediation	Expert determination	Other (specify)
(i) under £50,000						
(ii) £50,000 to under£200,000						
(iii)£200,000 to under £1 million						
(iv) £1 million to under £10 million						
(v) over £10 million						

14. In your opinion how has the number of arbitrations changed over the past 5 years? Where 1 = significantly reduced , 2 = reduced, 3 = no change, 4 = increased and 5 = significantly increased.						
	Significantly Reduced 1	2	3	4	Significantly increased 5	Do not know
(i) small arbitrations						
(ii) medium arbitrations						
(iii) large arbitrations						

15. In your opinion how has the number of arbitrations changed over the period from 10 years ago to 5 years ago ? Where 1 = significantly reduced , 2 = reduced, 3 = no change, 4 = increased and 5 = significantly increased.						
	Significantly Reduced 1	2	3	4	Significantly increased 5	Do not know
(i) small arbitrations						
(ii) medium arbitrations						
(iii) large arbitrations						

16. Please make any comments relating to the number of arbitrations in construction that you consider might be useful to the research.

17. To what extent do you agree/disagree that there are now fewer disputes arising in the construction industry than in 1997(when the Arbitration Act came into force). Using the scale 1= totally agree, 2= agree	
1. totally agree	2. agree
3. neutral	4. disagree
5. totally disagree	6. do not know

18. In respect of the following statements regarding features of arbitration, how much do you agree/disagree with the following statements? Using the scale from 1= totally disagree through to 7 = totally agreement							
	totally disagree 1	2	3	4	5	6	totally agree 7
(a) parties are able to choose the arbitrator							
(b) first choice arbitrator is often unavailable to accept appointment							
(c) delays caused due to unavailability of arbitrator when arranging meetings							
(d) there is a lack of confidence in arbitrators decisions							
(e) the parties can influence the choice of procedures							
(f) parties have a reasonable opportunity to present their case							
(g) parties have a reasonable opportunity to deal with the other party's case							
(h) delays are caused due to the unavailability of party advisers when arranging meetings							
(i) lawyers are reluctant to depart from court style procedures							
(j) lawyers prefer to use an adversarial approach							
(k) lawyers tend to be aggressive or confrontational in the actual proceedings							
(l) lawyer's fees are a substantial part of the overall cost of the arbitration							
(m) it is too much like litigation							
(n) procedures can be tailored to suit the case							
(o) the procedures of arbitration are flexible							
(p) being held in private is advantageous							
(q) the law of arbitration is complex							
(r) procedures are too adversarial							
(s) arbitration takes too long from start to final decision							
(t) procedures used are easily understood							
(u) having a binding award is advantageous							
(v) decisions provide justice between the parties							
(w) appeals against awards are severely limited							
(x) arbitrations are too costly							
(y) the winning party gets their costs							

Please comment on any other feature of arbitration that you feel night be useful to this study.

19. How do you rate the effect of the following factors on your choice of arbitration as the method of solving construction disputes? Where the 1 end of the scale represents significantly negative affect and the 7 end of the scale a significant positive affect							
	Significant negative 1	2	3	4	5	6	Significant positive 7
(a) parties are able to choose the arbitrator							
(b) first choice arbitrator is often unavailable to accept appointment							
(c) delays caused due to unavailability of arbitrator when arranging meetings							
(d) there is a lack of confidence in arbitrators decisions							
(e) the parties can influence the choice of procedures							
(f) parties have a reasonable opportunity to present their case							
(g) parties have a reasonable opportunity to deal with the other party's case							
h) delays are caused due to the unavailability of party advisers when arranging meetings							
(i) lawyers are reluctant to depart from court style procedures							
(j) lawyers prefer an adversarial approach							
(k) lawyers tend to be confrontational in the actual proceedings							
(l) lawyer's fees are a substantial part of the overall cost of the arbitration							
(m) it is too much like litigation							
(n) procedures can be tailored to suit the case							
(o) the procedures of arbitration are flexible							
(p) the process is private							
(q) complexity of arbitration law							
(r) too adversarial							
(s) complexity of procedures used							
(t) the award is binding							
(u) decisions provide justice between the parties							
(v) appeals against awards are severely limited							
(w) the cost of arbitration							
(x) the winning party gets their costs							
(y) parties can agree to exclude appeals on errors of law							

Please comment on any other feature of arbitration that you feel night be useful to this study.

20. In your opinion is the speed of making a decision more important than getting a decision that is correct?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

21. In your opinion is cost saving more important than getting a decision that provides justice between the parties?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

22. Is privacy more important than getting a decision that provides justice between the parties?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

23. Do you consider it important that the arbitrator has technical knowledge of the subject matter of the dispute?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

24. Assuming a claim is fully justified, is it more important to get a quick decision than to get the full amount claimed if this will take a long time to ascertain?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

25. Do you consider that you must win at all cost?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

26. Do you consider when involved in arbitration it is essential to be represented by a lawyer?	
1. rarely	2. not generally
3. neutral	4. generally
5. almost always	

27. Please rate the following on how important you consider them to be in the effective running of the arbitral process . Where 1 represents “no importance” and 7 represents “extremely important”							
	no importance 1	2	3	4	5	6	Extremely important 7
(a) the overall control of costs							
(b) keeping costs proportional to the claim							
(c) limiting the amount of costs a party can recover							
(d) costs going to the winning party							
(e) winning party not getting costs for issues lost							
(f) winning party not getting all of their costs if they have acted unreasonably during the arbitration							
(g) the overall control of time							
(h) limiting the amount of documents to be disclosed							
(i) limiting the number of expert witnesses							
(j) limiting the number of witnesses of fact							
(k) limiting the amount of time given to each party to present their case at a hearing							
(l) submitting a detailed claim early in the proceedings							
(m) early submission of how the claim is to be proven							
(n) early submission of the law to be relied upon							
(o) complying with time limits in arbitrator’s orders							
(p) the use of expedited methods							
(q) the use of procedures based on litigation (court)							
(r) the use of procedures that depart from litigation (court)							
(s) early determination of issues							

28. Do you generally find that the arbitrator involves you in deciding what procedures are to be used?							
rarely 1	2	3	4	5	6	always 7	Not applicable

29. Do you generally find that your legal adviser involves management in deciding procedures to be used?							
rarely 1	2	3	4	5	6	always 7	Not applicable

30. How satisfied were you generally with the arbitrations that you have been involved with?

31. From your experience would you use arbitration again?	
Yes	No

32. If you answered no to Q36, what features of arbitration,if any, would need to change to alter your mind?

33. Please tick only those reasons that would make (or will make) you select **Litigation** instead of arbitration. If generally you would not select Litigation over Arbitration, do not tick any of the boxes.
Litigation:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
Any comments of other factors affecting your choice

34. Please tick only those reasons that would make (or will make) you select **Statutory Adjudication** instead of arbitration. If generally you would not select Statutory Adjudication over Arbitration, do not tick any of the boxes.
Statutory Adjudication:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
Any comments of other factors affecting your choice

35. Please tick only those reasons that would make (or will make) you select **Mediation** instead of arbitration. If generally you would not select Mediation over Arbitration, do not tick any of the boxes.
Mediation:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
7. is not dependant on third party decision
Any comments of other factors affecting your choice

36. Please tick only those reasons that would make (or will make) you select **Expert Determination** instead of arbitration. If generally you would not select Expert Determination over Arbitration, do not tick any of the boxes.
Expert Determination:-
1. is quicker than arbitration
2. is less expensive than arbitration
3. is less complex than arbitration
4. has less legal involvement than arbitration
5. gives more party control than arbitration
6. provides a more just result than arbitration
Any comments of other factors affecting your choice

37. . Would you be prepared to take part in a face to face/telephone confidential interview which would last 30-40 minutes	
Yes	No

38. If you answered yes to Q38, please supply Name, Telephone number and Email

Thank you for your assistance.

APPENDIX D INTERVIEW QUESTIONS TO ARBITRATORS

Question 1

The research suggests that the number of disputes has not decreased since the AA was brought into force, but the number of arbitrations has fallen. Why do you think that this is so?

Question 2

There is a statutory obligation on arbitrators to use procedures that avoid unnecessary delay and expense. My research indicates, to a significant level, that arbitrators involve party representatives in deciding those procedures. The research also indicates that to party advisers, cost has the largest negative effect on choosing arbitration and duration not too far behind. With this level of involvement in choosing procedures by party advisers why do you think that cost remains a top negative issue?

Question 3

Keeping costs proportional to the claim rates high on the list of important features for the effective running of arbitration for both Lawyers and Users of arbitration. It is however at the bottom of the list for arbitrators. Why do you think that arbitrators consider this feature to be of low importance?

Question 4

The courts now require cost estimates to be submitted by the parties early in the proceedings. The case of Mitchell v NGN suggests that this requirement will be enforced in most circumstances. What is your view of implementing this into arbitration?

APPENDIX E INTERVIEW QUESTIONS TO LAWYERS

Question 1

The research shows that a lack of confidence in arbitrators' decisions is a major negative effect on choosing arbitration. There were also some comments that inferred that there was a problem with the quality of arbitrators. What do you think is meant by these results?

Question 2

The research suggests that the number of disputes has not decreased since the AA was brought into force, but the number of arbitrations has fallen. Why do you think that this is so?

Question 3

A significant number of respondents consider that a correct decision is more important than the speed of decision and that justice is more important than saving costs. When considering respondents' first choice of method, arbitration scores considerably below some methods that are quicker and cheaper than arbitration, but are susceptible to incorrect or unjust decisions. Why do you think that this is?

Question 4

There is a statutory obligation on arbitrators to use procedures that avoid unnecessary delay and expense. My research indicates, to a significant level, that arbitrators involve party representatives in deciding those procedures. The research also indicates that to party advisers, cost has the largest negative effect on choosing arbitration and duration not too far behind. With this level of involvement in choosing procedures by party advisers why do you think that cost remains a top negative issue?

Question 5

The control of time and costs have a high scores in the list of importance of features for the effective running of arbitration. Limiting the number of expert witnesses, witnesses of fact, documents, the time allowed to present the case at a hearing and limiting recoverable costs all should help reduce duration and cost of arbitration, however all have low scores on the list. Why do you think that this is?

Question 6

The courts now require cost estimates to be submitted by the parties early in the proceedings. The case of Mitchell v NGN suggests that this requirement will be enforced in most circumstances. What is your view of implementing this into arbitration?

APPENDIX F RATING TABLES FOR LAWYERS AND USERS INDIVIDUALLY

RATING ARBITRATION AS A METHOD OF DISPUTE RESOLUTION

Lawyers

	poor								excellent			
LAWYERS ARBITRATION	**1+2**	**1+2+3**	1 (-3)	2 (-2)	3 (-1)	4 (0)	5 (1)	6 (2)	7 (3)	**mean**	**5+6+7**	**6+7**
small dispute	27	38	11	16	9	8	7	2	1	**2.89**	10	3
medium dispute	11	26	2	9	15	11	11	5	1	**3.72**	17	6
large dispute	5	9	2	3	4	13	16	9	7	**4.72**	32	16
TOTAL	43	73	15	28	28	32	34	16	9		59	25

Users

	poor								excellent			
USERS ARBITRATION	**1+2**	**1+2+3**	1 (-3)	2 (-2)	3 (-1)	4 (0)	5 (1)	6 (2)	7 (3)	**mean**	**5+6+7**	**6+7**
small dispute	20	27	16	4	7	4	7	1	3	**2.93**	11	4
medium dispute	15	21	4	11	6	7	7	4	3	**3.53**	14	7
large dispute	11	17	3	8	6	9	7	6	3	**3.93**	16	9
TOTAL	**46**	**65**	**23**	**23**	**19**	**20**	**21**	**11**	**9**		**41**	**20**

RATING OF METHODS OF DISPUTE RESOLUTION AS FIRST CHOICE

Lawyers – small disputes

SMALL DISPUTES – LAWYERS FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ.	TOTAL
Under £50K	***0***	6	24	16	2	48
Over £50K under £200K	***1***	6	26	19	0	52
Over £200,000K under £1 mill.	***2***	15	22	12	0	51
Over £1 mill. under £10 mill.	***5***	22	12	12	0	51
Over £10 mill	***8***	25	8	11	0	52
TOTAL	***16***	**74**	**92**	**70**	**2**	**254**

Users – small disputes

SMALL DISPUTES – USERS FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***2***	2	12	12	3	31
Over £50K under £200K	***0***	1	14	17	3	35
Over £200,000K under £1 mill.	***6***	0	17	12	1	36
Over £1 mill. under £10 mill.	***12***	2	11	10	2	37
Over £10 mill	***9***	9	7	7	4	36
TOTAL	***29***	**14**	**61**	**58**	**13**	**175**

Lawyers – medium disputes

MEDIUM DISPUTES – LAWYERS FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***1***	5	27	16	0	49
Over £50K under £200K	***2***	7	26	18	0	53
Over £200,000K under £1 mill.	***4***	18	15	16	0	53
Over £1 mill. under £10 mill.	***8***	25	5	14	0	52
Over £10 mill	***9***	27	3	13	0	52
TOTAL	***24***	**82**	**76**	**77**	**0**	**259**

Users – medium disputes

MEDIUM DISPUTES – USERS FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***2***	2	12	14	2	32
Over £50K under £200K	***0***	1	15	17	2	35
Over £200,000K under £1 mill.	***5***	0	19	12	1	37
Over £1 mill. under £10 mill.	***13***	2	10	10	3	38
Over £10 mill	***10***	11	5	7	4	37
TOTAL	***30***	**16**	**61**	**60**	**12**	**179**

Lawyers – large disputes

LARGE DISPUTES – LAWYERS FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***2***	11	20	14	2	49
Over £50K under £200K	***4***	14	15	19	1	53
Over £200,000K under £1 mill.	***5***	23	9	15	1	53
Over £1 mill. under £10 mill.	***5***	32	2	14	0	53
Over £10 mill	***7***	31	1	14	0	53
TOTAL	***23***	**111**	**47**	**76**	**4**	**261**

Users – large disputes

LARGE DISPUTES – USERS FIRST CHOICE	***arbitration***	litigation	adjudication	mediation	expert determ	TOTAL
Under £50K	***2***	2	13	14	1	32
Over £50K under £200K	***1***	0	16	16	2	35
Over £200,000K under £1 mill.	***6***	0	15	14	2	37
Over £1 mill. under £10 mill.	***12***	3	10	9	3	37
Over £10 mill	***8***	10	6	7	4	35
TOTAL	***29***	**15**	**60**	**60**	**12**	**176**

APPENDIX G ARBITRATORS' RESPONSES: SIGNIFICANCE TEST OF THE DIFFERENCE BETWEEN THOSE RESPONDING INSIDE 4 WEEKS AND THOSE AFTER 4 WEEKS

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q13a - Parties are able to choose the arbitrator is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.990	Retain the null hypothesis.
2	The distribution of Q13b - Unavailability of first choice arbitrator is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.021	Reject the null hypothesis.
3	The distribution of Q13c - Delays caused by arbitrator due to unavailability is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.423	Retain the null hypothesis.
4	The distribution of Q13d - Lack of confidence in arbitrators decisions is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.936	Retain the null hypothesis.
5	The distribution of Q13e - Parties can influence the choice of procedures is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.990	Retain the null hypothesis.
6	The distribution of Q13f - Parties have reasonable oportunity to present their case is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.658	Retain the null hypothesis.
7	The distribution of Q13g - Parties have reasonable opportunity to deal with other parties case is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.297	Retain the null hypothesis.
8	The distribution of Q13h - Delays caused by party advisers due to unavailability is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.883	Retain the null hypothesis.
9	The distribution of Q13i - Lawyers reluctant to depart from court style proceedings is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.990	Retain the null hypothesis.
10	The distribution of Q13j - Lawyers prefere adversarial approach is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.816	Retain the null hypothesis.
11	The distribution of Q13k - Lawyers tend to be confrontational in the proceedings is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.497	Retain the null hypothesis.
12	The distribution of Q13l - Lawyers fees are a substantial part of overall costs is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.199	Retain the null hypothesis.
13	The distribution of Q13m - It is too much like litigation is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.576	Retain the null hypothesis.
14	The distribution of Q3n - Procedures can be tailored to suit the case is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.297	Retain the null hypothesis.
15	The distribution of Q13o - Procedures of arbitration are flexible is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.497	Retain the null hypothesis.
16	The distribution of Q13p - Being held in private is advantageous is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.244	Retain the null hypothesis.
17	The distribution of Q13q - The law of arbitration is complex is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.883	Retain the null hypothesis.
18	The distribution of Q13r - Procedures are too adversarial is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.423	Retain the null hypothesis.
19	The distribution of Q13s - Arbitration takes too long is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.297	Retain the null hypothesis.

20	The distribution of Q13t - Procedures are easily understood is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.497	Retain the null hypothesis.
21	The distribution of Q13u - Having a binding award is advantageous is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.199	Retain the null hypothesis.
22	The distribution of Q13v - Decisions provide justice between the parties is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.497	Retain the null hypothesis.
23	The distribution of Q13w - Appeals agains awards are severely limited is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
24	The distribution of Q13x - Arbitration is too costly is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.423	Retain the null hypothesis.
25	The distribution of Q13y - The winning party gets their costs is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.990	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q14 - Is speed of making a decision more important than correct decision is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.739	Retain the null hypothesis.
2	The distribution of Q15 - Is cost saving more impoetant than justice between the parties is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.297	Retain the null hypothesis.
3	The distribution of Q16 - Is it important that arbitrator is a lawyer is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.897	Retain the null hypothesis.
4	The distribution of Q17 - Should arbitrator have technical knowledge of subject of dispute is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.998	Retain the null hypothesis.
5	The distribution of Q18 - Is it essential that parties are represented by a lawyer is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
6	The distribution of Q19 - Assuming claim fully justified is a quick decision more important than getting all that is claimed is the same across categories of arbitrators under 4 weeks/over 4 weeks.	Independent-Samples Kolmogorov-Smirnov Test	.897	Retain the null hypothesis.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q16a - Parties are able to choose arbitrator is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.594	Retain the null hypothesis.
2	The distribution of Q16b - Unavailability of first choice arbitrator is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.988	Retain the null hypothesis.
3	The distribution of Q16c - Delays caused by arbitrator due to unavailability is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.944	Retain the null hypothesis.
4	The distribution of Q16d - Lack of confidence in arbitrators decisions is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.998	Retain the null hypothesis.
5	The distribution of Q16e - Parties can influence the choice of procedures is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.668	Retain the null hypothesis.
6	The distribution of Q16f - Parties have reasonable oportunity to present their case is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.678	Retain the null hypothesis.
7	The distribution of Q16g - Parties have reasonable opportunity to deal with other parties case is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.282	Retain the null hypothesis.
8	The distribution of Q16h - Delays caused by party advisers due to unavailability is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.896	Retain the null hypothesis.
9	The distribution of Q16i - Lawyers reluctant to depart from court style procedures is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.997	Retain the null hypothesis.
10	The distribution of Q16j - Lawyers prefere adversarial approach is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.974	Retain the null hypothesis.
11	The distribution of Q16k - Lawyers fees are a substantial part of overall costs is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.374	Retain the null hypothesis.

	Null Hypothesis	Test	Sig.	Decision
22	The distribution of Q16v - Appeals agains awards are severely limited is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.573	Retain the null hypothesis.
23	The distribution of Q16w - Arbitration is too costly is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
24	The distribution of Q16x - The winning party gets their costs is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.731	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

12	The distribution of Q16l - It is too much like litigation is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.699	Retain the null hypothesis.
13	The distribution of Q16m - Procedures can be tailored to suit the case is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.276	Retain the null hypothesis.
14	The distribution of Q16n - Procedures of arbitration are flexible is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.464	Retain the null hypothesis.
15	The distribution of Q16o - Being held in private is advantageous is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.059	Retain the null hypothesis.
16	The distribution of Q16p - The law of arbitration is complex is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
17	The distribution of Q16q - Procedures are too adversarial is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.710	Retain the null hypothesis.
18	The distribution of Q16r - Arbitration takes too long is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.810	Retain the null hypothesis.
19	The distribution of Q16s - Procedures are easily understood is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.922	Retain the null hypothesis.
20	The distribution of Q16t - Having a binding award is advantageous is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.358	Retain the null hypothesis.
21	The distribution of Q16u - Decisions provide justice between the parties is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.791	Retain the null hypothesis.

APPENDIX H LAWYERS' RESPONSES: SIGNIFICANCE TEST OF THE DIFFERENCE BETWEEN THOSE RESPONDING INSIDE 4 WEEKS AND THOSE AFTER 4 WEEKS

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q16a - Parties are able to choose arbitrator is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.594	Retain the null hypothesis.
2	The distribution of Q16b - Unavailability of first choice arbitrator is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.988	Retain the null hypothesis.
3	The distribution of Q16c - Delays caused by arbitrator due to unavailability is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.944	Retain the null hypothesis.
4	The distribution of Q16d - Lack of confidence in arbitrators decisions is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.998	Retain the null hypothesis.
5	The distribution of Q16e - Parties can influence the choice of procedures is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.668	Retain the null hypothesis.
6	The distribution of Q16f - Parties have reasonable oportunity to present their case is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.678	Retain the null hypothesis.
7	The distribution of Q16g - Parties have reasonable opportunity to deal with other parties case is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.282	Retain the null hypothesis.
8	The distribution of Q16h - Delays caused by party advisers due to unavailability is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.896	Retain the null hypothesis.
9	The distribution of Q16i - Lawyers reluctant to depart from court style procedures is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.997	Retain the null hypothesis.
10	The distribution of Q16j - Lawyers prefere adversarial approach is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.974	Retain the null hypothesis.
11	The distribution of Q16k - Lawyers fees are a substantial part of overall costs is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.374	Retain the null hypothesis.

12	The distribution of Q16l - It is too much like litigation is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.699	Retain the null hypothesis.
13	The distribution of Q16m - Procedures can be tailored to suit the case is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.276	Retain the null hypothesis.
14	The distribution of Q16n - Procedures of arbitration are flexible is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.464	Retain the null hypothesis.
15	The distribution of Q16o - Being held in private is advantageous is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.059	Retain the null hypothesis.
16	The distribution of Q16p - The law in arbitration is complex is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
17	The distribution of Q16q - Procedures are too adversarial is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.710	Retain the null hypothesis.
18	The distribution of Q16r - Arbitration takes too long is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.810	Retain the null hypothesis.
19	The distribution of Q16s - Procedures are easily understood is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.922	Retain the null hypothesis.
20	The distribution of Q16t - Having a binding award is advantageous is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.358	Retain the null hypothesis.
21	The distribution of Q16u - Decisions provide justice between the parties is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.791	Retain the null hypothesis.
22	The distribution of Q16v - Appeals agains awards are severely limited is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.573	Retain the null hypothesis.
23	The distribution of Q16w - Arbitration is too costly is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
24	The distribution of Q16x - The winning party gets their costs is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.731	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q21a - Parties are able to choose arbitrator is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.485	Retain the null hypothesis.
2	The distribution of Q21b - Unavailability of first choice arbitrator is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.516	Retain the null hypothesis.
3	The distribution of Q21c - Delays caused by arbitrator due to unavailability is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.843	Retain the null hypothesis.
4	The distribution of Q21d - Lack of confidence in arbitrators decisions is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
5	The distribution of Q21e - Parties can influence the choice of procedures is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.895	Retain the null hypothesis.
6	The distribution of Q21f - Parties have reasonable oportunity to present their case is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
7	The distribution of Q21g - Parties have reasonable opportunity to deal with other parties case is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.965	Retain the null hypothesis.
8	The distribution of Q21h - Delays caused by party advisers due to unavailability is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.232	Retain the null hypothesis.
9	The distribution of Q21i - Lawyers reluctant to depart from court style procedures is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
10	The distribution of Q21j - Lawyers prefere adversarial approach is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.998	Retain the null hypothesis.
11	The distribution of Q21k - Lawyers fees are a substantial part of overall costs is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.995	Retain the null hypothesis.
22	The distribution of Q21v - Appeals against awards is severely limited is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.990	Retain the null hypothesis.
23	The distribution of Q21w - The cost of arbitration is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.738	Retain the null hypothesis.
24	The distribution of Q21x - The winning party gets their costs is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
25	The distribution of Q21y - Parties can agree to excludeappeals on an error of law is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

12	The distribution of Q21l - It is too much like litigation is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
13	The distribution of Q21m - Procedures can be tailored to suit the case is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.004	Reject the null hypothesis.
14	The distribution of Q21n - Procedures of arbitration are flexible is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.550	Retain the null hypothesis.
15	The distribution of Q21o - The process is private is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.084	Retain the null hypothesis.
16	The distribution of Q21p - Complexity of arbitration law is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.044	Reject the null hypothesis.
17	The distribution of Q21q - Too adversarial is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
18	The distribution of Q21r - Arbitration takes too long from start to fiish is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.887	Retain the null hypothesis.
19	The distribution of Q21s - Complexity of procedures used is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
20	The distribution of Q21t - The award is binding is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.373	Retain the null hypothesis.
21	The distribution of Q21u - Decisions provide justice between the parties is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.952	Retain the null hypothesis.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q29a - The overall control of costs is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.557	Retain the null hypothesis.
2	The distribution of Q29b - Keeping costs proportional to claim is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.956	Retain the null hypothesis.
3	The distribution of Q29c - Limiting the amount of costs a party can recover is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.992	Retain the null hypothesis.
4	The distribution of Q29d - costs going to the winning party is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.710	Retain the null hypothesis.
5	The distribution of Q29e - Winning party not getting cost for decisions lost is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
6	The distribution of Q29f - Winning party not getting all of their costs if have acted unreasonably is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.955	Retain the null hypothesis.
7	The distribution of Q29g - The overall control of time is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.929	Retain the null hypothesis.
8	The distribution of Q29h - Limiting the amount of documents to be disclosed is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
9	The distribution of Q29i - Limiting the number of expert witnesses is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.872	Retain the null hypothesis.
10	The distribution of Q29j - Limiting the number of witnesses of fact is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.946	Retain the null hypothesis.
11	The distribution of Q29k - Limiting the amount of time to present their case at the hearing is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
12	The distribution of Q29l - Submitting a detailed claim early in the proceedings is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.994	Retain the null hypothesis.
13	The distribution of Q29m - Early submission of how the claim is to be proven is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.706	Retain the null hypothesis.
14	The distribution of Q29n - Early submission of the law to be relied upon is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.917	Retain the null hypothesis.
15	The distribution of Q29o - Complying with time limits in arbitrator's orders is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.946	Retain the null hypothesis.
16	The distribution of Q29p - The use of expedited methods is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.685	Retain the null hypothesis.
17	The distribution of Q29q - The use of procedures based on litigation is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.910	Retain the null hypothesis.
18	The distribution of Q29r - The use of procedures that depart from litigation is the same across categories of under & over 1 month	Independent-Samples Kolmogorov-Smirnov Test	.984	Retain the null hypothesis.
19	The distribution of Q29s - The early determination of issues is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.374	Retain the null hypothesis.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q9a - First choice of method for SMALL disputes under £50,000 is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
2	The distribution of Q9b - First choice of method for SMALL disputes over £50,000 but under £200,000 is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
3	The distribution of Q9c - First choice of method for SMALL disputes over £200,000 but under £1 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.499	Retain the null hypothesis.
4	The distribution of Q9d - First choice of method for SMALL disputes over £1 mill. but under £10 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.977	Retain the null hypothesis.
5	The distribution of Q9e - First choice of method for SMALL disputes over £10 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
6	The distribution of Q10a - First choice of method for MEDIUM disputes under £50,000 is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.594	Retain the null hypothesis.
7	The distribution of Q10b - First choice of method for MEDIUM disputes over £50,000 but under £200,000 is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
8	The distribution of Q10c - First choice of method for MEDIUM disputes over £200,000 but under £1 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.950	Retain the null hypothesis.
9	The distribution of Q10d - First choice of method for MEDIUM disputes over £1 mill. but under £10 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
10	The distribution of Q10e - First choice of method for MEDIUM disputes over £10 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
11	The distribution of Q11a - First choice of method for LARGE disputes under £50,000 is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.594	Retain the null hypothesis.
12	The distribution of Q11b - First choice of method for LARGE disputes over £50,000 but under £200,000 is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	.391	Retain the null hypothesis.
13	The distribution of Q11c - First choice of method for LARGE disputes over £200,000 but under £1 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
14	The distribution of Q11d - First choice of method for LARGE disputes over £1 mill. but under £10 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
15	The distribution of Q11e - First choice of method for LARGE disputes over £10 mill. is the same across categories of under & over 1 month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

APPENDIX I USERS' RESPONSES: SIGNIFICANCE TEST OF THE DIFFERENCE BETWEEN THOSE RESPONDING INSIDE 4 WEEKS AND THOSE AFTER 4 WEEKS

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q11 Under £50,000 is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.529	Retain the null hypothesis.
2	The distribution of £50,000 to under £200,000 is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.906	Retain the null hypothesis.
3	The distribution of £200,000 to under £1 million is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
4	The distribution of £1 million to under £10 million is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.996	Retain the null hypothesis.
5	The distribution of Over £10 million is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
6	The distribution of Q12 Under £50,000 is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.496	Retain the null hypothesis.
7	The distribution of £50,000 to under £200,000 is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.738	Retain the null hypothesis.
8	The distribution of £200,000 to under £1 million is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.947	Retain the null hypothesis.
9	The distribution of £1 million to under £10 million is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.997	Retain the null hypothesis.
10	The distribution of Over £10 million is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
11	The distribution of Q13Under £50,000 is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.773	Retain the null hypothesis.
12	The distribution of £50,000 to under £200,000 is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
13	The distribution of £200,000 to under £1 million is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
14	The distribution of £1 million to under £10 million is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
15	The distribution of Over £10 million is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q18a Parties are able to choose the arbitrator is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.996	Retain the null hypothesis.
2	The distribution of Q18b First choice arbitrator is often unavailable to accept appointment is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.569	Retain the null hypothesis.
3	The distribution of Q18c Delays caused due to unavailability of arbitrator when arranging meetings is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.905	Retain the null hypothesis.
4	The distribution of Q18d There is a lack of confidence in arbitrators' decisions is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.344	Retain the null hypothesis.
5	The distribution of Q18e The parties can influence the choice of procedures is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.449	Retain the null hypothesis.
6	The distribution of Q18f Parties have a reasonable opportunity to present their case is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
7	The distribution of Q18g Parties have a reasonable opportunity to deal with the other party's case is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.955	Retain the null hypothesis.
8	The distribution of Q18hDelays are caused due to the unavailability of party advisers when arranging meetings is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
9	The distribution of Q18i Lawyers are reluctant to depart from court style procedures is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.986	Retain the null hypothesis.
18	The distribution of Q18rProcedures are too adversarial is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
19	The distribution of Q18s Arbitration takes too long from start to final decision is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.993	Retain the null hypothesis.
20	The distribution of Q18t Procedures used are easily understood is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.818	Retain the null hypothesis.
21	The distribution of Q18u Having a binding award is advantageous is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.960	Retain the null hypothesis.
22	The distribution of Q18v Decisions provide justice between the parties is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.412	Retain the null hypothesis.
23	The distribution of Q18w Appeals against awards are severely limited is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.528	Retain the null hypothesis.
24	The distribution of Q18xArbitrations are too costly is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.313	Retain the null hypothesis.
25	The distribution of Q18y The winning party gets their costs is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.654	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

10	The distribution of Q18j Lawyers prefer to use an adversarial approach is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
11	The distribution of Q18k Lawyers tend to be aggressive or confrontational in the actual proceedings is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.960	Retain the null hypothesis.
12	The distribution of Q18l Lawyers' fees are a substantial part of the overall cost of the arbitration is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.993	Retain the null hypothesis.
13	The distribution of Q18m It is too much like litigation is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.986	Retain the null hypothesis.
14	The distribution of Q18n Procedures can be tailored to suit the case is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
15	The distribution of Q18o The procedures of arbitration are flexible is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.847	Retain the null hypothesis.
16	The distribution of Q18p Being held in private is advantageous is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
17	The distribution of Q18q The law of arbitration is complex is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q19a Parties are able to choose the arbitrator is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.980	Retain the null hypothesis.
2	The distribution of Q19b First choice arbitrator is often unavailable to accept appointment is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.770	Retain the null hypothesis.
3	The distribution of Q19c Delays caused due to unavailability of arbitrator when arranging meetings is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.678	Retain the null hypothesis.
4	The distribution of Q19d There is a lack of confidence in arbitrators' decisions is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.230	Retain the null hypothesis.
5	The distribution of Q19e The parties can influence the choice of procedures is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.481	Retain the null hypothesis.
6	The distribution of Q19f Parties have a reasonable opportunity to present their case is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.777	Retain the null hypothesis.
7	The distribution of Q19g Parties have a reasonable opportunity to deal with the other party's case is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
8	The distribution of Q19h Delays are caused due to the unavailability of party advisers when arranging meetings is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
9	The distribution of Q19i Lawyers are reluctant to depart from court style procedures is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.785	Retain the null hypothesis.
10	The distribution of Q19j Lawyers prefer an adversarial approach is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.407	Retain the null hypothesis.
11	The distribution of Q19k Lawyers tend to be confrontational in the actual proceedings is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.529	Retain the null hypothesis.
12	The distribution of Q19l Lawyers' fees are a substantial part of the overall cost of the arbitration is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.341	Retain the null hypothesis.
13	The distribution of Q19m It is too much like litigation is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.901	Retain the null hypothesis.
14	The distribution of Q19n Procedures can be tailored to suit the case is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.987	Retain the null hypothesis.
15	The distribution of Q19o The procedures of arbitration are flexible is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.970	Retain the null hypothesis.
16	The distribution of Q19p The process is private is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.628	Retain the null hypothesis.
17	The distribution of Q19q Complexity of arbitration law is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
18	The distribution of Q19r Too adversarial is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.529	Retain the null hypothesis.
19	The distribution of Q19s Complexity of procedures used is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
20	The distribution of Q19t The award is binding is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.728	Retain the null hypothesis.
21	The distribution of Q19u Decisions provide justice between the parties is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.984	Retain the null hypothesis.
22	The distribution of Q19v Appeals against awards are severely limited is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
23	The distribution of Q19w The cost of arbitration is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.662	Retain the null hypothesis.
24	The distribution of Q19x The winning party gets their costs is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.999	Retain the null hypothesis.
25	The distribution of Q19y Parties can agree to exclude appeals on errors of law is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Q27a The overall control of costs is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
2	The distribution of Q27b Keeping costs proportional to the claim is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.989	Retain the null hypothesis.
3	The distribution of Q27c Limiting the amount of costs a party can recover is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.980	Retain the null hypothesis.
4	The distribution of Q27d Costs going to the winning party is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.976	Retain the null hypothesis.
5	The distribution of Q27e Winning party not getting costs for issues lost is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.622	Retain the null hypothesis.
6	The distribution of Q27f Winning party not getting all of their costs if they have acted unreasonably during the arbitration is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.041	Reject the null hypothesis.
7	The distribution of Q27g The overall control of time is the same across categories of those responing witin one month & those over one month	Independent-Samples Kolmogorov-Smirnov Test	.817	Retain the null hypothesis.
8	The distribution of Q27h Limiting the amount of documents to be disclosed is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.636	Retain the null hypothesis.
9	The distribution of Q27i Limiting the number of expert witnesses is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.750	Retain the null hypothesis.
10	The distribution of Q27j Limiting the number of witnesses of fact is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.961	Retain the null hypothesis.
11	The distribution of Q27k Limiting the amount of time given to each party to present their case at a hearing is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
12	The distribution of Q27l Submitting a detailed claim early in the proceedings is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
13	The distribution of Q27m Early submission of how the claim is to be proven is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.992	Retain the null hypothesis.
14	The distribution of Q27n Early submission of the law to be relied upon is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.977	Retain the null hypothesis.
15	The distribution of Q27o Complying with time limits in arbitrator's orders is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.967	Retain the null hypothesis.
16	The distribution of Q27p The use of expedited methods is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.809	Retain the null hypothesis.
17	The distribution of Q27q The use of procedures based on litigation (court) is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.
18	The distribution of Q27r The use of procedures that depart from litigation (court) is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	.992	Retain the null hypothesis.
19	The distribution of Q27s Early determination of issues is the same across categories of those responing witin one month & those over one month.	Independent-Samples Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

APPENDIX J REPORT ON THE FINDINGS OF THE RESEARCH SENT TO PEERS

Report on the findings of research into the factors that influence the performance and choice of arbitration

Research has been undertaken in respect of the use of arbitration to resolve disputes in the construction industry in England & Wales. Data has been collected from construction arbitrators, construction lawyers and users of arbitration (the parties) by means of questionnaires to all three categories of respondent together with interviews with several construction arbitrators and construction lawyers. As it is important that the research is valid; one method of determining this is to establish whether the findings concur with the experience of experts within the field of construction arbitration, who have not been involved in the original data collection process. There are also recommendations shown below and opinions are sought as to the whether the recommendations are reasonable, will improve arbitration and are implementable.

Due to anecdotal evidence suggesting a decline in the use of arbitration, investigation was undertaken into the use of arbitration in the construction industry. Construction was chosen because of its susceptibility for conflict between the parties which has an effect on the economy of the country. The aim of the literature search was to identify the problems associated with arbitration and whether the Arbitration Act 1996 (AA) had resolved those problems. Due to the many references of decline in the use of arbitration it was considered necessary to identify those features of arbitration that influenced parties and their advisers, towards or away from choosing arbitration. In addition it was considered necessary to determine the level of importance features of arbitration were held by arbitrators, lawyers and users to effectively conduct arbitration. As arbitration has to compete with other methods of dispute resolution, investigation was carried out as to the standing of arbitration compared to litigation, statutory adjudication, mediation and expert determination, over variables of value of claim and size of dispute. The standing of each method of dispute resolution was determined by asking respondents to specify which method they would choose as first choice

over the variables mentioned in the previous sentence and comparing their respective distributions. It is acknowledged that contracts often specify the method, however the investigation sought to determine the circumstances in which respondents considered a particular method the most suitable choice. Moreover information was required as to the extent arbitrators involve parties lawyers in choosing procedures and the involvement of parties by their legal advisers. These aspects were investigated and below are the main findings.

PLEASE SUPPLY YOUR COMMENTS ON THE VALIDITY OF THE RESEARCH FINDINGS

Some of the sections below show multiple finding. It would be helpful if you would comment on each finding, should you be in a position to do so. Where you concur with all of the multiple findings in a section, one comment will be sufficient to cover them. If you concur with several of the multiple findings, one comment will suffice to cover each group. If a finding is outside of your experience, such as section 3 which refers to the percentage chance of arbitration being chosen as first choice method, “do not know” will suffice, a comment of “I am not surprised” or any other comment you consider helpful will also be appreciated if it is within your expectation.

1. Measuring from when the data was collected in 2013, two consecutive 5 year time periods were selected, one being from 2003 to 2008 and the other from 2008 to 2013. Respondents considered that during both time periods there was a significant reduction in the use of construction arbitration. The reduction however was less for the period from 2008 to 2013 than for the period from 2003 to 2008 indicating a slowdown in the decline of the use of construction arbitration between the two periods.

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2. The rating of arbitration by respondents as a method of dispute resolution is generally considered as neither poor nor excellent, holding a neutral position.

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3. Arbitration being considered as first choice compared to choosing one or other of litigation, statutory adjudication, mediation or expert determination is low at 11.6% chance. This is largely due to the popularity of adjudication and mediation for claims under £1 million and litigation for claims over £10 million.

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4. For claims between £1 million and £10 million for small and medium disputes, arbitration's standing, having regard to respondents' scores, is similar to that of litigation, adjudication and mediation. For claims over £10 million the scores for arbitration are not significantly different to those of mediation and better than those for adjudication. Litigation scores for claims over £10 million are significantly greater than those of any other method in this investigation.

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5. The features that have a positive effect on arbitration being selected are that the process is private with a binding award, having procedures that allow control of the arbitration, which provides justice and results in the winning party receiving their costs.

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Features having a negative effect away from arbitration are the cost of arbitration, with a lack of confidence in arbitrators' decisions, being subject to delay due to

unavailability issues, complexity of arbitration procedures and law and being too close to the common law system.

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6. The survey indicates that arbitrators involve lawyers to a significant extent in deciding procedures to be used in arbitration and that lawyers involve their clients to a significant extent in deciding procedures to be used.

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7. Prior to the passing of the AA, there were several concerns regarding arbitration; the main ones being cost, duration, that it was too much like litigation and the law being complex. This research suggests that cost and duration issues have not been resolved, whilst being too much like litigation and the law being complex have partially been resolved.

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8. The two most important features for running arbitration effectively were found to be controlling of costs and duration.

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There were, however, a number of features that would assist in keeping costs down that were rated close to, or not far above, the neutral position of the scale

used, where 1 represented unimportant and 7 extremely important, indicating that these features were of lower priority and therefore less likely to be implemented. These were limiting disclosure of documents, limiting the number of witnesses of fact and opinion, limiting the amount of time given to present the claim and defence, limiting recoverable costs, not getting costs for issues lost and submitting at an early stage the law that would be relied upon. It is also noted that individually Lawyers also rated the early determination of issues and the use of expedited methods in the neutral zone.

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Further as there were significant differences between the view of arbitrators and either Lawyers or Users as to the importance of 9 out of the 19 features investigated, it is not unreasonable to consider that there may be some conflict in determining some of the procedures.

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9. The inference from this study is that lawyer and user respondents consider that cost and duration of arbitration are major negative factors on choosing arbitration as the method of resolving construction disputes and that controlling cost and duration is very important to effectively conduct arbitration. As referred to in 6 above, arbitrators involve lawyers and lawyers their clients in determining procedures and the survey indicates that a significant majority of arbitrators review cost and time saving procedures during arbitration. There should therefore be ample opportunity to control cost and duration of arbitration. As referred to in 8 above, there is reluctance for users and lawyers in particular, to the implementation of many of the procedures that allow this to occur. Interview data

indicates that there is a tendency for lawyers to move towards court style proceedings and that truncating arbitration procedure is likely to be considered by lawyers as an infringement of their party's rights.

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These results indicate a possible causal link to arbitration remaining expensive and time consuming.

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Should you have any other comments that you may wish to make regarding the validity of these findings, please include them below.

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